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**CERAMICS OF THE TYNE-FORTH REGION, C.
3500-1500 BC**

Dana Corrine Emmiline Millson

Thesis submitted for the qualification of Doctor of Philosophy

Department of Archaeology

Durham University

2012

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*In loving memory of my Papa, whose fascination with the past inspired me from childhood;
my Grandpa, who built my first sandbox; and my Nana, who nurtured my interest in other
cultures by taking me around the world, twice.*

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ABSTRACT

Since the beginnings of archaeology, the study of the past in the Tyne-Forth region has been shadowed by the influence of the political boundary that divides it. Although it has long been acknowledged by archaeologists that the modern polities of Scotland and England did not exist in the past, this divide has continued to affect research design, interpretation and publication. In addition to this, the focus on ‘core areas’, such as Wessex and Orkney, have long been used to interpret the findings in this region, although the remains found between the Tyne and Forth continue to demonstrate that this area was unique and did not necessarily adhere to the same lifeways as these distant lands. For too long this has caused the area to be seen as a periphery. This research has attempted to consider the Neolithic and Bronze Age of this area as a whole, by ignoring the Anglo-Scottish border and by considering the archaeological remains of the entire region using a single methodology and the data was evaluated to establish the norms for the region first, before relating it to what is known nationally. Experimental work was first carried out to learn more about the material and the ways ceramics can be studied in order to design the research so that it would yield the greatest amount of data. A provenance study of the archaeological remains was then carried out. A total of 333 vessels from the Middle Neolithic to the Middle Bronze Age, including: Impressed Ware, Grooved Ware, Beaker, Food Vessel, Vase Urns, Collared Urns, Cordoned Urns and Bucket Urns were examined. The resulting data were statistically analysed and evidence for cultural interaction, particularly during the introduction of Beakers, was found. The presence local influence on some pottery (previously identified as Neolithic-derived pottery by Millson et al. 2012 in the Milfield Basin, Northumberland) was also recorded throughout the region. Both of these important findings were considered in-depth and a better understanding of the Late Neolithic/Bronze Age transition is proposed for this region.

TABLE OF CONTENTS

<i>Acknowledgements</i>		<i>iii</i>
<i>Abstract</i>		<i>iv</i>
Prologue		1
Chapter 1	Theoretical Framework and Approaches	13
	Theoretical Framework	14
	Considering Ceramics within this Framework	18
	Study Questions	25
	Current Methods in Ceramic Analysis	26
	The Criteria	28
Chapter 2	Prehistoric Ceramic Manufacturing Methods	46
	Clay Acquisition	47
	Processing and ‘Tempering’	53
	Techniques in Pot Formation	56
	Surface Treatment	61
	Drying and Firing	63
	Constructing an Image of the Past	69
Chapter 3	Prehistoric Pottery Traditions in Britain, C. 3500-1500 BC	74
	Impressed Ware	75
	Grooved Ware	80
	Beakers	86
	Food Vessels	101
	Cinerary Urns	105
	A Chaotic Continuity	113
	Discussion	114
Chapter 4	Previous Archaeological Research and Sites Summary	118
	The Antiquarian Period	118

	The Beginnings of a Scientific Archaeology	121
	The Technology of World War II and Use for Archaeology: 1945-1980	122
	Excavating sites as part of a landscape and the rise of developer-funded archaeology: 1980-present	123
	Regional Trends	125
	Middle Neolithic – Impressed Ware – 3500-2800 cal BC	126
	Late Neolithic – Grooved Ware – 2800-2400 cal BC	131
	Late Neolithic/Early Bronze Age – Beaker – 2400-1800 cal BC	139
	Early Bronze Age – Food Vessels – 2200-1700 cal BC	144
	Early/Middle Bronze Age –Collared/Cordoned/Urns – 1900-1500 cal BC	145
Chapter 5	Results	150
	The Role of Experimental Archaeology in Ceramic Studies	150
	Experimentation and its purpose for this research	152
	Methods and Results	154
	The Dataset	161
Chapter 6	Analysis and Interpretation	163
	The Ceramic Traditions	163
	<i>Impressed Ware</i>	163
	<i>Grooved Ware</i>	172
	<i>Beaker</i>	189
	<i>Food Vessels</i>	199
	<i>Vase Urns</i>	204
	<i>Collared Urns</i>	212
	<i>Cordoned Urns</i>	218
	<i>Bucket Urns</i>	222
	<i>Accessory Vessels</i>	224

Chapter 7	Putting the Data into Perspective	228
	Finding local <i>vernacular</i> tradition	228
	Local Interpretations of Ceramic Style	228
	Trends within the Funerary Evidence	234
	The current view on contact	237
	Towards a narrative for the Tyne-Forth region	243
	An enduring legacy	245
Epilogue		248
<i>Bibliography</i>		252

DVD – Appendices and Tables

Appendix 1	The Sites of the Study Area
Appendix 2	Impressed Ware
Appendix 3	Grooved Ware
Appendix 4	Regional interpretations
Appendix 5	Beakers
Appendix 6	Food Vessels
Appendix 7	Vase Urns
Appendix 8	Collared Urns
Appendix 9	Cordoned and Bucket Urns
Appendix 10	Accessory Vessels
Appendix 11	Radiocarbon dates for Impressed Ware in the Tyne-Forth Region
Appendix 12	Radiocarbon dates for Grooved Ware in the Tyne-Forth Region
Appendix 13	Radiocarbon dates for Beakers in the Tyne-Forth Region
Appendix 14	Radiocarbon dates for Food Vessels in the Tyne-Forth Region
Appendix 15	Radiocarbon dates for Other contemporary (non-Beaker) pottery in the Tyne-Forth region

Appendix 16 Radiocarbon dates for Cinerary Urns (Collared, Cordoned, Vase and Bucket Urns) in the Tyne-Forth Region

Table 5.1	Impressed Ware
Table 5.2	Grooved Ware
Table 5.3	Regional interpretations
Table 5.4	Beakers
Table 5.5	Food Vessels
Table 5.6	Vase Urns
Table 5.7	Collared Urns
Table 5.8	Cordoned and Bucket Urns
Table 5.9	Accessory Vessels
Table 5.10	Impressed Ware, not accessible
Table 5.11	Grooved Ware, not accessible
Table 5.12	Other Contemporary pottery, not accessible
Table 5.13	Beakers, not accessible
Table 5.14	Food Vessels, not accessible
Table 5.15	Collared, Cordoned and Bucket Urns, not accessible

LIST OF FIGURES

Figure 2.1	An example of spalling during firing.	55
Figure 2.2	Building a pot by pinching.	57
Figure 2.3	Building a pot by coiling.	57
Figure 2.4	Different coil joins in cross section.	58
Figure 2.5	Moulding a pot in Udaipur, India.	59
Figure 2.6	Scraping inside the Beaker from Twizel, Northumberland.	61
Figure 2.7	‘Smoking’ the pots before firing.	65
Figure 2.8	The black core of the Vase Urn rim of EE 134, from Luffness, Lothian demonstrates a fast, hot firing for the vessel.	66
Figure 3.1	Impressed Ware substyles and their characteristics	78
Figure 3.2	Grooved Ware from Skara Brae, Orkney.	81
Figure 3.3	Grooved Ware substyles.	81
Figure 3.4	An example of Clacton substyle Grooved Ware.	82
Figure 3.5	Two examples of Woodlands substyle Grooved Ware.	82
Figure 3.6	Durrington Walls substyle of Grooved Ware.	83
Figure 3.7	An example of Orcadian Grooved Ware from Quanterness.	83
Figure 3.8	Examples of dilochocephalic and brachycephalic skull types.	87
Figure 3.9	Beaker classification systems 1871-1970	89
Figure 3.10	Clarke’s Beaker substyles and their development over space and time.	89
Figure 3.11	Lanting & van der Waals’ (1972) classification of Beakers in Britain.	91
Figure 3.12	Lanting & van der Waals’ (1972) Beaker substyles and their development.	92
Figure 3.13	Yorkshire Vase from Newton, Northumberland.	103
Figure 3.14	A bipartite Food Vessel from West Lilburn.	103
Figure 3.15	A tripartite Food Vessel from Cheviot Walk.	103
Figure 3.16	A Ridged Vase from Knocken, Lanarkshire.	104

Figure 3.17	A Food Vessel bowl from West Water Reservoir, West Linton, Peeblesshire and a Globular Bowl from Villa Real, Jesmond, Tyne & Wear.	104
Figure 3.18	A Collared Urn from Milborne 14, Dorset.	106
Figure 3.19	Longworth's (1984: 7) Eight Basic Forms for Collared Urns in Britain and Ireland.	107
Figure 3.20	Details of Longworth's Primary and Secondary Series of Collared Urns.	109
Figure 3.21	A horseshoe handled urn from Corfe Castle, Dorset.	109
Figure 3.22	A Vase Urn, previously called an Enlarged Food Vessel, from Uddingston, Lanarkshire.	110
Figure 3.23	Vase Urn from Bedrule, Roxburghshire.	110
Figure 3.24	Cordoned Urn from Drumelzier, Peeblesshire.	111
Figure 3.25	Bucket Urn from Glenluce.	111
Figure 3.26	Gibson's (2004) classification of Accessory Vessels	112
Figure 4.1	Map of the monuments in the Milfield Basin, Northumberland.	136
Figure 4.2	Milfield North Henge and pit alignment.	137
Figure 4.3	Ewart henge with surrounding pit alignments.	137
Figure 5.1-5.4	Building a vessel.	155
Figure 5.5	Firing replica vessels.	155
Figure 5.6	A beeswax-sealed pot after use to boil water.	158
Figure 5.7	The remains of the pot exposed for 11 months.	159
Figure 5.8	The buried replica pot after 11 months in the soil.	160
Figure 5.9	The contours left on the surface of the buried vessel were still visible, although the pot was much degraded.	160
Figure 5.10	The remains of two vessels in Ontario, on the surface and in the pit.	160
Figure 6.1	An example of the Ford substyle from the Greenwell Collection.	166
Figure 6.2	An example of the Meldon Bridge substyle.	166
Figure 6.3	An example of Fengate style Impressed Ware from Thirlings, P60, Northumberland.	168

Figure 6.4	A second example, P72.4, of Fengate style from Thirlings, Northumberland.	168
Figure 6.5	An example, V1, of Fengate Ware from Overhailes Farm, East Lothian.	168
Figure 6.6	Fengate Ware pottery, P57.4, from Thirlings, Northumberland.	168
Figure 6.7	Vessel 57.7 from Thirlings, Northumberland demonstrates the overhanging collar of Fengate style Impressed Ware.	168
Figure 6.8	Vessel 57.8 from Thirlings, Northumberland.	168
Figure 6.9	Vessel P59 has a straight neck with a slightly inturned collar and flat rim top. It fits into the Fengate style of Impressed Ware as well.	168
Figure 6.10	A rim sherd from vessel P2 from Cheviot Quarry, Northumberland.	169
Figure 6.11	The rim sherd from Lanton Quarry shares stylistic similarities to P2 at Cheviot Quarry in style and form.	169
Figure 6.12	BM 55 from Hedderwick, East Lothian is decorated with the impression of a shell shape.	169
Figure 6.13	Incised herringbone decoration on the rim top of a sherd from Hedderwick, East Lothian.	170
Figure 6.14	Semi-circles of twisted cord ornament the rim top of a Ford style sherd from Crookhaven.	170
Figure 6.15	Rows of birdbone impressions ornament the exterior surface of sherds at Hedderwick, East Lothian.	170
Figure 6.16	Rows of short cord impressions are used for decoration on sherd 1743b at Crookhaven, Northumberland.	170
Figure 6.17	Short rows of cord impressions on BM 592 from Hedderwick, East Lothian.	171
Figure 6.18	P57 from Thirlings with a roughened surface on the external side of the sherd.	171
Figure 6.19	BM 611 from Hedderwick, East Lothian bears a similar roughening on its surface.	171
Figure 6.20	A stepped rim profile on P2 from Cheviot Quarry, Northumberland.	176
Figure 6.21	Vessel 009-13 from Milfield North Pit, Northumberland bears a similarly bevelled rim type to P2 from Cheviot Quarry.	176

Figure 6.22	P25F from Yeavering, Northumberland is ornamented on the rim top with applied pellets that form a scalloped edge on the rim.	176
Figure 6.23	Examples of Clacton substyle Grooved Ware.	178
Figure 6.24	Examples of Durrington Walls substyle Grooved Ware.	179
Figure 6.25	Examples of Woodlands substyle Grooved Ware.	180
Figure 6.26	The use of ‘feathering’ as a border element on Beakers.	193
Figure 6.27	An example of horizontal lines emphasising the neck of a Beaker is found at Ruchlaw Mains, East Lothian.	193
Figure 6.28	The decoration on this Beaker from Ford, Northumberland, consists of a lattice of doughnut-shaped impressions.	194
Figure 6.29	The Beaker from Huntingdonshire, illustrated by Clarke.	194
Figure 6.30	The Drem Beaker with metopes illustrated.	194
Figure 6.31	A photograph of the motifs on the Drem Beaker and an ear of 2-row barley show the similarity of the features.	195
Figure 6.32	Beaker EG 14 from Drem, Haddington, East Lothian.	196
Figure 6.33	The decoration on this Beaker is done according to tradition on one side.	197
Figure 6.34	But on the other side of the same Beaker the decoration changes and is less well-executed.	197
Figure 6.35	The decoration on other parts of the pot similarly change and demonstrate different patterns co-existing on the pot.	197
Figure 6.36	The base of the Beaker from Easter Wooden, Roxburghshire.	197
Figure 6.37	EG 74 from Thornton, Innerwick, East Lothian.	198
Figure 6.38	EG 93 from Kirkhill Braes, East Lothian.	198
Figure 6.39	BP2 from Eweford West, East Lothian.	198
Figure 6.40	Base of Beaker from Newton, Northumberland.	203
Figure 6.41	Base of Beaker from Patrickholm sand pit, Lanarkshire.	203
Figure 6.42	Beaker from Castle Hill, Callaly, Northumberland.	204
Figure 6.43	Beaker from Patrickholm sand pit, Lanarkshire.	204
Figure 6.44	Beaker from Darn Hall, Peeblesshire.	204

Figure 6.45	The scalloped collar on the Roseborough I vessel from Northumberland.	207
Figure 6.46	Vase Urn from Ryton-on-Tyne, Tyne & Wear.	208
Figure 6.47	Vase Urn with heavy ridge stops from Goatscrag, Northumberland.	208
Figure 6.48	Applied decoration on EA 185 from Berwickshire.	209
Figure 6.49	Twisted cord decoration of infilled triangles on the rim top from Howlet's Ha', Berwickshire.	209
Figure 6.50	Illustration of the vessel from Hoprig, Cocksburnpath, Berwickshire.	210
Figure 6.51	Illustration of EA 182 from Berwickshire.	210
Figure 6.52	An example of a vessel in Longworth's Primary Series, B range.	213
Figure 6.53	Infilled triangles on the collar of an urn.	217
Figure 6.54	Panels of horizontal and vertical rows of cord on the collar of an urn.	217
Figure 6.55	Urn from East Links, East Lothian with horseshoe-shaped impressions on collar.	217
Figure 6.56	EA 186, from Berwickshire, is decorated with a reed or bone on the collar.	217
Figure. 6.57	Cordoned Urn from Kirkpark, Musselburgh, Midlothian.	221
Figure 6.58	Cordoned Urn from Drumelzier, Peeblesshire.	221
Figure 6.59	Cordoned Urn found at Meldon Bridge, Peeblesshire.	221
Figure 6.60	EA 38 from Magdalen Bridge, Edinburgh, Midlothian.	222
Figure 6.61	Vessel from Whitton Hill, Northumberland.	222
Figure 6.62	An example of an Accessory Vessel from Kirkpark, Midlothian.	226
Figure 6.63	The base of the Accessory Vessel from Low Moralee Farm, Northumberland.	226
Figure 6.64	Faint incision decoration on the vessel wall of EC 30 from Kirkpark, Midlothian.	226
Figure 7.1	The Beaker/Food Vessel hybrid from Milfield North henge, Northumberland.	231
Figure 7.2	The Beaker from Cheviot Quarry, found with other coarse, undiagnostic sherds.	231
Figure 7.3	EG 28 from Easter Wooden, Roxburghshire.	236

Figure 7.4	EG 25 from Mossplat, Lanarkshire.	236
Figure 7.5	EQ 138 from Crawford, Lanarkshire.	236
Figure 7.6	EG 55 from Oliver, Peeblesshire.	236
Figure 7.7	The vessel from Bathgate, Edinburgh, Midlothian.	239
Figure 7.8	The vessels from Truchen-er-Hroëk, Brittany and Men-ar-Rompet, Côtes-d'Armor.	239
Figure 7.9	Double rows of cord on a sherd from Archerfield, East Lothain matches stylistically with those found elsewhere.	240
Figure 7.10	The Beaker from Ponteland, Northumberland as compared to the vessel from Monsheim.	241
Figure 7.11	A comparison of the Beakers from Mallem and EP 174 from Cairnpapple, West Lothian.	241

LIST OF TABLES

Table 1.1	Form terms and definitions.	34
Table 1.2	Fabric terms and definitions.	37
Table 1.3	Surface Treatment terms and definitions.	39
Table 1.4	Decorative Techniques terms and definitions.	41
Table 5.1	Summary of Experiments and Results.	153
Table 6.1	Examples of the national styles of Neolithic ceramics from the Impressed Ware and Grooved Ware traditions, compared to those found in the Tyne-Forth region.	185

LIST OF MAPS

Map 1.1	Map of Britain.	10
Map 1.2	Locations of Sites.	29
Map 6.1	Impressed Ware sites in the Tyne-Forth region.	164
Map 6.2	Grooved Ware sites in the Tyne-Forth region.	173
Map 6.3	Beaker sites in the Tyne-Forth region.	190
Map 6.4	Food Vessel sites in the Tyne-Forth region.	200
Map 6.5	Vase Urn sites in the Tyne-Forth region.	205
Map 6.6	Collared Urn sites in the Tyne-Forth region.	215
Map 6.7	Cordoned and Bucket Urn sites in the Tyne-Forth region.	219
Map 6.8	Accessory Vessel sites in the Tyne-Forth region.	224
Map 7.1	Contemporary Beaker-aged sites with non-Beaker pottery	232
Map 7.2	Location of Food Vessels compared to Beakers in the Tyne-Forth region	235

LIST OF GRAPHS

Graph 6.1	Vessel proportions of Bronze Age Ceramics.	211
Graph 6.2	The Size of the Vessels in the Bronze Age.	213

PROLOGUE

This is a thesis about boundaries. It is a study of the ways in which people organise themselves and interact with one another and how these relationships can be discerned from the archaeological record. Originally, the primary purpose of this research was to understand a region by ignoring its modern political boundary. The Tyne-Forth region is a varied landscape from east to west, but extending north to south, between the River Tyne and the Firth of Forth, it is otherwise homogenous and ongoing. And yet, it is split in half by the Anglo-Scottish border. It was intended that by overlooking the border the prehistoric past could be interpreted more realistically so that the boundaries that Neolithic and Bronze Age people recognised could be identified.

The result of this work has, firstly, been the acknowledgement of the naïveté with which this aim was drawn, and that the term ‘boundary’ is, perhaps, a misnomer. In the 1970s and early 1980s, the study of boundaries became popular in the research designs of the New Archaeologists who attempted to incorporate anthropological concepts into the study of past people. Spatial analyses of artefact types were carried out to establish a sense of past territories and it was commonly believed that a boundary was present where the artefacts were no longer used or where typical characteristics of that artefact type changed (Hodder 1982b: 146; for example, Renfrew 1973b; Mellars 1976; Sherratt 1976). However, in practice, boundaries are not the solid lines we expect them to be and they do not form cultural ‘islands’ on the landscape (Bashkov 2004: 443; Field 2012: 16). Just as culture is fluid and changing, so are the boundaries that form as that culture creates and recreates its identity and interrogates its relationship to those perceived as the ‘other’ (Boaz 1924; Bashkov 2004: 445; Lightfoot & Martinez 1995). Taking the view that a cultural territory can be quantitatively defined is a Processualist fallacy because any cultural zone will have had ever-changing edges of influence. Moreover, although the core part of the cultural area will have been more homogenous than the periphery, the beginning of one and the end of the other will never be completely clear in the archaeological record because frontiers are areas of communication and hybridization. It is for this reason, then, that over the years this project had to take on a more complex aim to truly understand the nature of boundaries as areas of cultural interaction.

In order to do this, it had also to be acknowledged that there are modern boundaries created by our culture that influence and bias the way we look at the past. It is true that

archaeologists' views of the past are often clouded by modern cultural identities. The way we perceive the world and identify ourselves within it is influenced by our culture, and, in turn, affects how we interpret the archaeological record. In this way we form our own boundaries that divide us from the past reality and prejudice our interpretations. During the literature review for this research, it became clear that the boundaries affecting the study of the Tyne-Forth region are three-fold. Firstly, its geographic location in the north of England and south of Scotland place it between the classically-known core Neolithic and Early Bronze Age cultural areas of Orkney and Wessex. Secondly, it is itself divided by an important modern political border between England and Scotland. And finally, the period being considered in this work lies over the dividing line that separates the ages of stone and metal. All of these serve to influence the way the archaeology of the region is explored and how it is interpreted.

Core-periphery archaeology: the blindfold of our history; true past reality; or, a taphonomic trick?

Since the first studies of prehistory in Britain, the greatest foci have been on the Wessex, Eastern Yorkshire and Orcadian landscapes. Perhaps due to the preserving qualities of chalk, the landscape offers large sites in Wessex and burial monuments filled with inhumations. There are upstanding monuments of stone and large earthen enclosures that still mark the wide, open plains and gentle hills. In Orkney, it must be certain that the greatest amount of archaeology has survived because, where elsewhere houses were made of wood, those found at Skara Brae and Barnhouse were made of stone. It is not surprising that these remains have captured the imagination and passion of so many archaeologists and that it has taken so many more people to excavate the remains. The fact that the remains in Wessex and Orkney have survived make them a unique pattern. But from pattern comes preconception, and so these areas have become the 'norm' for prehistoric life whilst other areas that do not fit the norm are seen as abnormal (Halliday 2012). As Harding (2000: 2) astutely notes, the areas with the greatest amount of archaeology have attracted the greatest number of archaeologists and thus, the standard understanding of the Neolithic and Bronze Age in Britain is based largely on these areas. These areas have become the authorities of the period for the entire country and an attitude has long stood that they represent the 'core' of Neolithic and Bronze Age civilisation whilst other parts of Britain were peripheral and less-advanced:

These archaeologically wealthy landscapes have often been regarded as continuations of the southern half of England and thus to be without a character or identity of their own, with the rest of the region accordingly maintaining its less than flattering status (Harding 2000: 2).

Many of the most prominent archaeologists of our time have theorised about the Neolithic and Bronze Age and created their models based on the findings of these two areas, but then attempted to relate them to the rest of the country (for example, Hodder 1990; Barrett 1994; Whittle 1996; Sherratt 1997; Thomas 1991; 1999; 2010). And when these models have been applied to places, such as the Tyne-Forth region, where the evidence does not fit, the core-periphery model becomes self-fulfilling as the differences in the remains become proof that the area was less on the ‘cutting edge’ (Frodsham 2000: 15-16; Harding 2000: 2-3):

As a result of more than 100 years of archaeological study, and almost two centuries after Colt Hoare, the chalklands of central southern England have been conceived of as a normative ‘core area’ and its archaeological record has been used to produce the synthetic narratives of the Neolithic, the Bronze Age and the Iron Age that are held to be typical of the rest of Britain, and this is especially true for the English regions, which have not had the political impetus of nationalist ideologies to generate an interest in exploring the potential, alternative, regionally distinctive narratives. As a result areas such as the north of England have been lacking good syntheses (Jones 2012: 2).

Since the Tyne-Forth region is set almost exactly between Orkney and Wessex, it could not get further away from either, which led Frodsham (1996) to describe it as a ‘No-man’s Land’. Not surprisingly, the region is very different from southern England or northern Scotland. The soils tend to be acidic so that organic materials do not survive well and the landscape of rolling high hills, deep valleys and rocky escarpments could not be further from the plains known 300 miles to the south. Thomas (1993) has rationalised that the archaeological remains in areas outside the core Wessex area may be different because, as the homogenous set of ideas that mark the Neolithic spread, they were adopted in ways that made sense to the locals of each area. Harding (2000) takes a similar standpoint and suggests that the landscape

itself, one of uplands and lowlands, that so dominates northern England, probably influenced these choices and formed the local identity. Whilst both of these ideas probably hold a great amount of truth, Thomas' presumption, especially, still relies on the notion that the core set of ideas had to have moved into the area from Orkney or Wessex.

Harding (2002: 3) attacks this and points out that some aspects of Bronze Age culture in Wessex, namely round barrows, actually have their origins in Neolithic Yorkshire and, in so many cases, when considering the island as a whole, the models that have been designed for the cultural development of Wessex appear to be the exception rather than the norm. A full discussion of Wessex prehistoric archaeology is well beyond the scope of this prologue, and the prominent works are considered in more detail in the following chapters, but to summarize for the purpose of this argument, the traditional interpretation of the Neolithic and Bronze Age in Britain includes the emergence of burial monuments to demarcate and 'claim' the land in the Early Neolithic, where people were inhumed collectively. This contrasts with the ceremonial monument complexes that included henges, stone circles and linear monuments between them that were constructed for the movement of living people in the Late Neolithic. And in the earliest Bronze Age the population grew and control of these people created a sense of the 'individual' that remains in the burial record as a new form of monument: the round mound under which one person was buried with grave goods. Many of the clusters of round mounds in the Stonehenge landscape begin with a typical 'Beaker burial' that included a flexed inhumation with a Beaker pot and jet buttons, beads, archery equipment and flint tools.

Taking a broader view of the archaeological remains, however, causes these generalisations to become more transparent. In the Early Neolithic, burial mounds were constructed in the southwest of Scotland, whilst rock art marked out the land in the southeast of the country, and although settlement increased in Cumbria in the Bronze Age, there were no round barrows (Harding 2000: 3; Evans 2012: 42). In the southeast of Scotland, there are no examples of the 'ritual landscapes' known further south (even in the northeast of England, only the Milfield Basin can be named), and in Yorkshire, round barrows were first built in the Middle Neolithic rather than in the Bronze Age. In central Britain, generally, Beakers are found in 'Beaker burials', but they are also found associated with cremations and in the same

monuments as Food Vessels, and in Ireland, Beakers are not found with burials at all, but were, rather, a domestic type of pottery (Carlin 2012).

So it is clear that these models do not work outside of Wessex because they are built on a core-periphery relationship that did not exist in the way it has been envisioned. They are too simplistic and linear for an expansive area of land that was home to many autonomous groups and the hierarchy we have created, based on the areas of best preservation, do not reflect the true past.

In the last 20 years especially, the Tyne-Forth region has seen much more archaeological interest and a concerted effort has been made to emphasize the region's individuality. But the Wessex-centred mentality has been hard to shake. Burgess' (1984) reference to the area as 'north Britain' could be excused as it was made around the same time as the core-periphery model was most-used, but even as the awareness of the region as having its own individual nature away from Wessex grew, particularly with Burgess' work, this attitude persisted. Indeed, Frodsham (2000: 15) points out the irony that the proceedings of the conference that took place in the late 1990s to focus on the Tyne-Forth was called *Northern Pasts* – a name that only makes sense from an English (and southern) point-of-view. Nationally, the Tyne-Forth continues to be treated as a backwater in larger-scale interpretations (recent examples are Needham's (2005) discussion of Beakers and Thomas' (2010) analysis of Grooved Ware). Thus, it is essential for those working in the area, and indeed anywhere in Britain outside Wessex, to be aware of and to challenge the core-periphery ideology that has too long surrounded Neolithic and Bronze Age studies.

A Divided Landscape: The Anglo-Scottish Border

One recurring cause for confusion in archaeological studies is the arbitrary nature of modern political boundaries. These create 'new' identities which may have little relevance to the past societies we seek to comprehend. Nowhere has the problem of anachronistic modern boundaries been more obstructive to archaeology than in the three-fold political division of Britain into the historical polities of England, Scotland and Wales. Thus, since the origins of archaeology in Britain, the prehistories of Scotland and England have been studied

separately, divided by the modern border that creates ideas of national identity that obscure the reality of the prehistoric past.

The practice of looking across the Anglo-Scottish border for reference sites or artefacts is not new. Since the 1970s, site reports drew on similarities between sites in the Scottish Borders and Northumberland and an awareness of the need to ignore the border was prevalent. Burgess' (1984) summary does this. But a divide has existed in research designs and subsequent summaries since, which is probably due to the fact that funding and archaeology generally is controlled by each respective government. Moreover, the archaeological finds are separated into two national museums, publications are made in two national journals and even if summaries of finds cover both sides of the border, the choice of an English or a Scottish publication must be made. Although the present location of the border lies on the River Tweed, a relatively modern line, the historical events of the last 500 years have made it an important boundary in the minds of people alive today, particularly those living nearest to it. The people who live in the Borders are Scots and the inhabitants of Northumberland, especially Newcastle in Tyne & Wear, are Geordies (named for their loyalty to King George in opposition to Scotland). Berwick-upon-Tweed, as a liminal place, has throughout history, held an autonomous identity and today is part of both the Scottish and English football leagues. The Anglo-Scottish border is a politically-charged symbol and it is closely tied to the identity of two opposing groups. The power of this should not be underestimated and, even as this is written, Scotland prepares for a referendum to determine if it should make this divide from the rest of Britain even more substantial.

And so, even though researchers in the Tyne-Forth have long known that the border must be ignored, it has proven difficult to do in practice. In the late 1990s, a regional conference was held which attempted to forge links between the Scottish and English contingents, and although both sides continue to actively try to work together and are largely of this same mind, the issues surrounding the border have persisted. Accordingly, in 2009, a much greater effort was made to create an ongoing venue for communication, which meets biannually. Through this, concerted efforts are being made to look at the data of the region as a whole (Chris Fowler's (in prep) study of Bronze Age burial practices is an example, as is the ScARF initiative, which focuses on inter-regional work (see www.socantscot.org)). Nevertheless, it is a difficult boundary to overcome. The fact remains that the opposition of

the two sides has not really to do with archaeology and so archaeologists cannot solve this problem, but are affected by it, which will continue to make a true borderless mentality difficult to achieve.

Temporal Borders – The Legacy of the Three-Age System

The third boundary that affects this research is the temporal line drawn between the age of stone and that of metal. The Three-Age System, much like the core-periphery model, is one that was derived from the data that was available when it was developed and was probably not intended to be thought of as rigidly as it has been. In Britain, the move from the Neolithic to the first metals occurred around 2400/2300 BC, after the first Beakers were adopted and so it has been argued that the transition occurred because of the cultural interaction associated with those Beakers: whether it was a mass immigration, the establishment of trade networks, the arrival of farming settlers, or the spread of an ideology.

To fit the model that life changed with the inception of the Bronze Age, evidence has been gathered pointing to the upland settlements that date to the early second millennium BC, the prominence of burials and cremations under round barrows, and the great distances that were travelled by people and ideas that must have occurred at this time to bring Beakers from so far away. These are then contrasted with the use of ritual monuments in the Neolithic and a perceived lack of movement (that is often based on negative evidence). However, the transition between these two is only significant if the changes that occurred were greater than changes that happened during the Neolithic or the Bronze Age. When evaluated against this wider timeframe, long distance movement can be seen at Duggleby Howe from the Middle Neolithic that is just as impressive as the Beaker-aged Amesbury Archer (Montgomery et al. 2007; Gibson & Bayliss 2009). Simply, the fact that most of the genetic diversity that is now known in northwest European populations was complete by the Bronze Age must indicate that there was high level of human movement from a very early period (Ludes et al. 2012). Upland settlement, as at Meldon Bridge, was constructed at an impressive scale from the Middle Neolithic and continued into the Grooved Ware period. Neolithic round mounds were built over inhumed remains and monumental sites continued to be enhanced and used for ritual activity through this transition.

It seems that part of the problem is that the type of evidence analysed from the Neolithic, monuments and settlement, contrasts with the Bronze Age burials and mobility of people and foreign goods (Bradley 1998: 3-4). Since the data are incomparable, the two periods will naturally appear different from one another. The conclusion of this doctoral work, which has been done with an effort to compare only like material, has been the recurring sense of continuous change from the Middle Neolithic to the Middle Bronze Age. The re-evaluation, analysis and collection of new data from a broad perspective have only shown the continuity and recreation of a local collective identity in the Third and Second millennia BC.

It is clear that the boundaries that we perceive in our Tyne-Forth region today in relation to Wessex, or divided by the Anglo-Scottish border, did not exist in the past. This should not be surprising, but the discussion of boundaries as places of cultural interaction, has been a focus in the archaeological community only since the 1980s, and it has reached its maturity only recently (Jones & Kirkham 2012; Whittle 2012). Although it is extremely difficult (to nearly impossible) to identify past boundaries since they were ever-changing, some evidence of cultural interaction that suggests the presence of cultural areas was found. It is believed that this marks a success. The study has been informative about the nature of boundaries and our part in the creation of narratives about the past. It has also provided an opportunity to try to move beyond this and to demonstrate that a better understanding of the past reality of life in this region is possible.

Previous Research

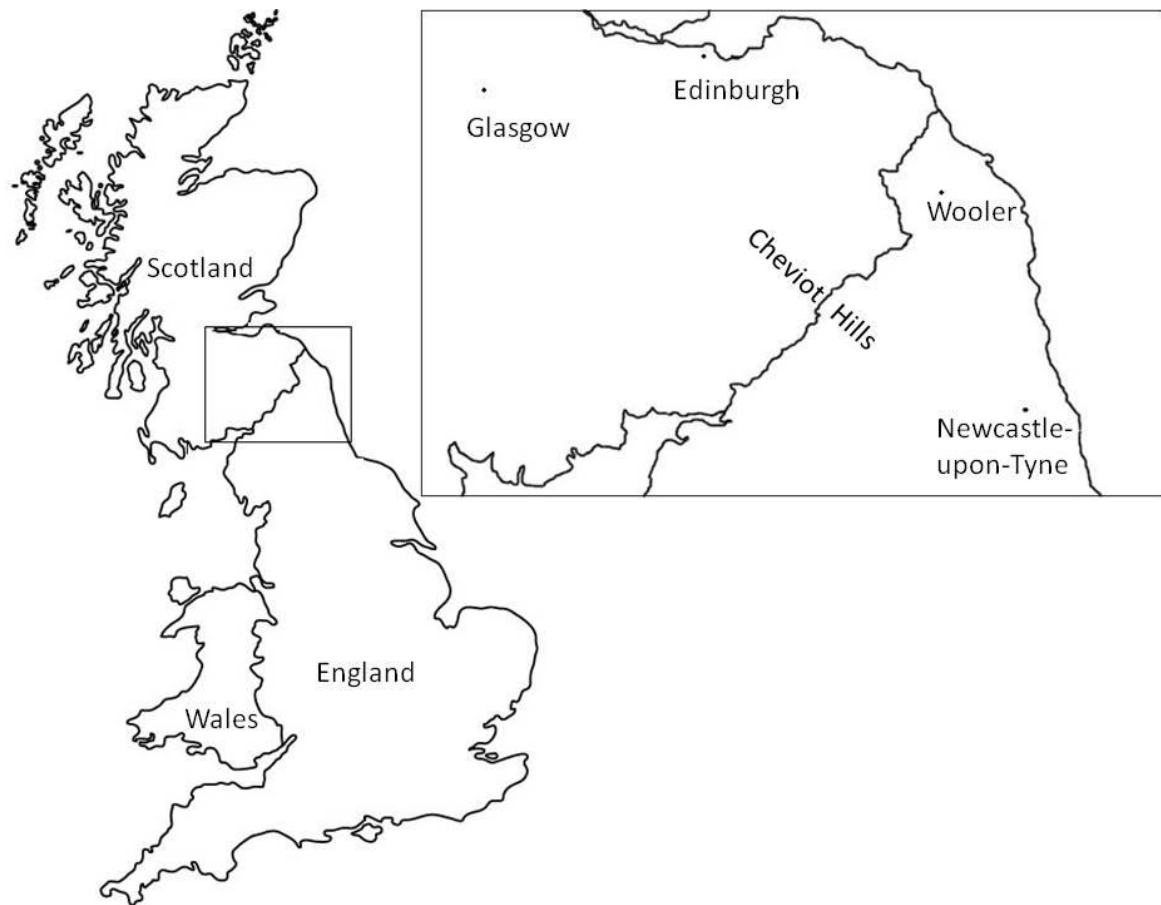
The impetus for this research was a pilot project that was done for my Master's degree in 2004-6 (Millson 2006). In response to Alex Gibson's (2002) criticism of the categorisation of Grooved Ware in the Milfield Basin, Northumberland, all of the Neolithic pottery that was available was analysed. Gibson had argued that sherds from many of the sites, such as Whitton Hill, Yeavering Henge, Thirlings and Milfield North Henge were not typical of Grooved Ware and should be excluded from the list. The results of the Master's research demonstrated that this group did, in fact, differ from Grooved Ware sherds in the Milfield Basin and subsequent radiocarbon dates, determined by Peter Marshall and Clive Waddington, confirmed the errant group was from the Beaker period (Millson et al. 2012).

This then opened questions surrounding the purpose and meaning of Beakers in the Milfield Basin and how this coarse, Grooved Ware-like pottery, called ‘Neolithic-derived’ by Millson et al. 2012, fit into the ceramic continuum. This PhD was designed to consider this.

The Research Design

With the above-mentioned issues in mind, this research was planned on a broad spatial and temporal scale. The study area was chosen to cover a roughly equal portion of Scotland and England on either side of the Tweed and natural boundaries were used to mark out its area since these are the only possible borders that will have existed in prehistory that remain today. Thus, the study area extends from the River Tyne to the Firth of Forth and from the North Sea coast to encompass all of the Scottish southern uplands and the Cheviot Hills (Map 1.1). It is because of the smaller number of assemblages found in this area, compared to other parts of Britain, that these parameters were set. A broad scope was important to ensure that enough pottery was included for the analysis to truly consider the area as an autonomous region rather than simply comparing a smaller group of assemblages to a national (or southern) standard. Once a local progression of style and tradition was established, it could then be compared to what is known elsewhere. It is this method that made visible the cultural interaction that preceded the Beakers, negotiated their adoption and fixed them into the local repertoire of ceramics.

The timeframe that was chosen was deliberately broad because the ceramic traditions in question, namely Grooved Ware, Beakers and Food Vessels, cannot be studied in isolation. To truly distinguish stylistic influences and regional characteristics, an understanding of what was made before and afterwards is essential. Since Impressed Ware has been linked stylistically to Food Vessels, the Middle Neolithic was deemed the most appropriate starting point. An end-point at the Middle/Late Bronze Age interface allowed for a roughly equal amount of time after the Neolithic/Bronze Age transition. Consequently, this research includes the analysis of Impressed Ware, Grooved Ware, Beaker, Food Vessels, Vase Urns, Bucket Urns, Collared and Cordoned Urns, and Accessory Vessels, as well as the less-diagnostic, regional pottery that is contemporary to these traditions.



Map 1.1: Map of Britain. The study area is indicated in the inset.

In comparison to Wessex or Orkney, the Tyne-Forth region has produced much less pottery. In order to determine if this is a direct reflection of past settlement and to evaluate the ability of the types of hand-built, open-fired ceramics made in the Neolithic and Bronze Age to withstand daily use, a programme of experimental archaeology was developed.

This analysis of the ceramics of the Tyne-Forth region is the first that has included all Neolithic and Bronze Age pottery from both sides of the Anglo-Scottish border in a single study. A total of 333 vessels, comprised of sherds and complete pots from 243 sites, were examined, which represents all of the pottery that was accessible from 2007-2011. It is unfortunate that at this time all three of the larger museums – the British Museum, National Museums Scotland and the Great North Museum - were under renovation and not all of the material was available. A little less than half of the Greenwell Collection was accessible, which reduced the percentage of vessels studied for this project the most; however, excluding

the Greenwell Collection, the material from the other assemblages amounted to approximately 85% of the known sites and included most of the antiquarian finds. Of the remaining ceramics, as much data as could be collected from the site reports was also included in this study.

The Plan of this Thesis

The information presented in this thesis has been organised with a clear purpose to present the data in a straightforward and constructive manner. Chapter 1 considers the methods that were used to examine the vessels in the study area, as well as the theoretical framework in which the methodology was designed. The merits and weaknesses of the prominently-held theories are debated.

In Chapter 2, the current knowledge of ceramic manufacturing techniques is discussed. This includes what is known about the materials geologically and chemically, as well as information that has been revealed through ethnographic studies and experimental work. The concept of the *chaîne opératoire* and how the stages of production can reflect individuals and groups is discussed.

Chapter 3 builds on this information in a critical discussion of the trends that compose the national traditions of the Neolithic and Bronze Age in Britain. Each ceramic style is examined, along with the prominent theories about its dissemination, and this is discussed critically in light of the latest research that has come from regional studies in other parts of northwest Europe.

Chapter 4 introduces the current understanding of the Late Neolithic and Early Bronze Age in the Tyne-Forth region, with details of the sites from which the assemblages were found. It offers a narrative of the lifeways of the ancient people who lived there and the cultures that changed over time. This chapter considers what the larger archaeological dataset suggests about the Neolithic to Bronze Age transition and creates a setting into which the final analysis of the pottery may be placed; a more general review of the literature is in Appendix 1.

In Chapter 5, the results of the experimental archaeology that was conducted to better understand the material and the trends from the provenance study of this dataset are then presented and discussed.

Chapters 6 and 7 analyse the results. The existence of examples of local interpretations of the greater national ceramic traditions is outlined and how it represents the unique cultural groups of central Britain is considered. This, therefore, allows the Tyne-Forth region to be placed within northwest Europe in its own right, rather than referring back to traditional ‘core areas’ in southern England or northern Scotland.

The result of this is an up-to-date catalogue of pottery, extending from the Middle Neolithic to the Middle Bronze Age in the Tyne-Forth region that can now be used on a national scale as representative of the area. There is also a better understanding of the cultural interaction that brought in Beakers and of what this may have represented to people living in the area at that time. This work has not resulted in a radical conclusion that explains how the Bronze Age changed the lives of people: in many ways it does not seem to have ushered in anything out of the existing norm. Nor does it result in the identification of specific groups in the Tyne-Forth region – the dataset, at this point, is simply too sparse for this. What this research does bring to light is the continuous individual nature of the archaeological evidence in the expanse of land that makes up east-central Britain and evidence for a venue where the interpretation of greater, national identities may have played out within the ceramic traditions.

CHAPTER 1: THEORETICAL FRAMEWORK AND APPROACHES

Introduction

The very first use of ceramics was long thought to be the Jōmon vessels from Japan; however, in the past ten years, as China has become more open to the West, more information about its archaeological past has become available. It is now known that the first ceramics were made by Palaeolithic peoples along the Yellow River in China (Hayden 2009; Chi & Hung 2012). In Britain, the first pottery appears on sites around 3900 cal BC, and it continued to be used and to evolve in style and form over time. It is still uncertain if the first pots were brought as objects from the Continent or if the knowledge was simply carried to native peoples of these islands. It would seem that a combination of these is probable.

Ceramic vessels would have been different from the leather bags and woven baskets that the people of Britain most probably already used. Clay is much more plastic, allowing for a greater creative outlet: a person can model clay into any shape and it will instantly stay in that shape, unlike leather or woven material. Pieces can be added and a work of art, even if it is seen in an entirely functional way, is born. Unlike baskets and bags, pots are permanent. Once clay is fired, it is much more durable; on a molecular level, it becomes stone. The act of committing something that was once wet and cold and could be touched, to fire that is hot, dry and cannot be touched, to produce an indestructible vessel of stone, even today, holds a certain magic to it, and to create a piece of art that can long outlive the potter offers a sense of immortality. This is not to say that the Neolithic people spent all of their time thinking about pots, but it is probable that they saw them as a new, useful tool that could be put directly on the fire, thus capturing greater amounts of heat, or one that could hold water and keep it cool and fresh longer. The very presence of pots indicates that the local people of Britain liked the new technology and found enough utility in it (be it functional, philosophical, or both) to focus on the craft and to become experts in potting when presented with the opportunity.

Since the study of modern archaeology began, people who were digging up past remains were faced with prehistoric ceramics. The ancient sherds and vessels tend to survive, especially if they are well-fired, and so relatively large quantities of them have been uncovered from Neolithic and Bronze Age sites. As a consequence, since the beginning of the culture-history period, they have been at the forefront of archaeological thought and useful as chronological and cultural markers. There is a wealth of material written on the subject of

prehistoric ceramics dating back to the late 19th century that utilises many different approaches to the material. It is with the benefit of these ideas and examples, as well as the acknowledgement of their weaknesses, that this study has been designed. Of particular importance, though, has been a clear understanding of the more recent work and philosophical debates of the past 50 years. This is because the greater concentration that was placed on theory and practice in the Processual and Post-processual periods has provided the building blocks with which to build a foundation for this research.

Theoretical Framework

The methodology of modern ceramic analysis stems from the debates between the three theoretical schools of the 20th century: the Culture-historians, the Processualists and the Post-processualists. Since the turn of the century, the Culture-historical perspective had looked at the past as a long path of historical events which led up to the present time. After World War II, as new technology allowed for absolute dates to be obtained and greater amounts of information to be compiled and stored, flaws in this system became apparent (Trigger 2008; Renfrew 1973, ix; Wiley 2002).

An accurate and meaningful history is more than a generalized narrative of the changes in composition of the archaeological record through time...If we hope to achieve the aim of re-constructing culture history, we must develop means for using archaeological remains as a record of the past and as a source of data for testing propositions which we set forth regarding past events, rather than a record we can read according to a set of a priori rules or interpretive principles whose application allow the skilled interpreter to 'reconstruct' the past (Binford 1968: 11).

Grappling with this were researchers such as Lewis Binford, and slightly later, Colin Renfrew and David Clarke, who began to develop new methodology that would later be called New Archaeology, or the Processualist movement (Trigger 2008; Wylie 2002). At first, they were simply attempting to make archaeology better by adopting more precise methods of enquiry, but ultimately, there was a complete overhaul of archaeological practice and thought. Binford had been trained in the natural sciences and so it was innate that he should approach archaeological material as he would other scientific matter: testing hypotheses experimentally, gathering new data, and developing new theories with the information acquired (Sabloff 1998: 42). He also advocated taking a multi-disciplinary approach, using

applications from other fields such as: sociology, biology, ecology, and psychology, and he insisted that archaeology should not be simply a study of inanimate objects, but an anthropology of the past (Binford 1962). In contrast to the previous theoretical basis, his was a discipline that did not follow a straight path where new information was simply added to the story, but it was more of a fibrous route where, “...every time you learn something new, it impacts on everything you ever thought you knew in some sense” (Sabloff 1998, 42, quoting Binford).

Similarly, in Britain, Renfrew took up this argument in his studies of European prehistory and culture change (Renfrew 1973a; 1973b; 1979). He argued that the scientific methods now were impossible to ignore as they finally allowed for truths, such as absolute dates for sites, to be ascertained. Moreover, the fundamental premises upon which archaeological interpretation had been based up until then were being disproved with radiocarbon dating, isotopic analysis, and other scientific methods (Renfrew 1973b, 15-16). This had become far more than the acceptance of new theories about the past, but a revolution that, “...herald[ed] the shift to a “new paradigm”, an entire new framework of thought” (Renfrew 1973b, 15). It is important to note, in light of later criticism, that this new way of assessing archaeological material, using scientific methods and mathematics, still maintained a theoretical and interpretative foundation. Clarke (1968, 465) stressed that, “scientific aids no more make archaeology a ‘science’ than a wooden leg makes a man into a tree”, and indeed, mathematics and science were simply the apparatus used to gain archaeological data to interpret. A greater focus was put on placing the data within its sociological framework and a reliance on ethnography allowed for data to be considered from different points of view, specifically non-Western ones, and to be placed in a presumably less-biased interpretation. Taking a multi-disciplinary approach and considering social thought changed the view that the artefacts were the remains of a static culture that could only change through the domination of another group to the idea that they represented a moment in time from a dynamic culture that was ever-changing. Binford’s Middle Range Theory attempted to act as, “...a kind of Rosetta Stone: a way of ‘translating’ the static, material stone tools found on an archaeological site into the vibrant life of a group of people who in fact left them there” (Binford 1983, 24). It was this application of sociological theory: Systems Theory, Structuralism and Marxist thought that diversified the field and united it more closely with the other social sciences. It is also these changes which initiated a new type of archaeology that would endure to the present day, one that was based on a diverse set of voices and opinions that approached the material

in novel and creative ways. However, it also ushered in three decades of bitter debate between extreme camps that would attempt to destroy one another.

In the 1980s and 1990s, the way in which the Processualists interpreted the archaeological past was questioned by a younger group who followed Post-modern philosophy. An awareness of the place of the individual and ideology in society was emphasized by these Post-processualists and a new epistemology and form of relativism was developed. They argued that the fundamental aspects of what makes up a culture, how it evolves, and how much we can really discern about the past had been overlooked (Trigger 2008: 450-51; Sabloff 1998: 91). Stemming from Pierre Bourdieu's (1977) concepts of the *habitus*, the "structuring structures" of our existence in the world (Bourdieu 1977, 72), and Martin Heidegger's (1954) "dwelling", or "being-in-the-world", the focus of research shifted to a greater consideration of individual experience within culture. The application of these ideas changed the focus of archaeology towards the individual, his or her choices and the concepts of agency, temporality, and the phenomenology of landscape in the 1980s and 1990s (Hodder 1982a; 1990; 1992; Ingold 1993; Tilly 1994; Thomas 1996). The perspectives of women and other minorities became more important, as did the way cultures hybridize when in contact with one another (Gilchrist 1991; Kroeber 1963; Lightfoot & Martinez 1995).

The Post-processualist theorists also contended that the New Archaeologists had been wrong to use science to study culture, and that, as positivists, they had, "divorc[ed] theory from practice", and so their archaeology was imbalanced and lacked the ability to be, "defended or refuted on an informed philosophical basis", something which is imperative for the progression of our understanding of the past (Shanks & Tilley 1987, 33). The natural sciences could not be used to study past societies, they said, because humans do not act like organisms and cultures are too variable for scientific laws to be applied to them as biological processes (Shanks & Tilley 1987, 35-40). Moreover, objectivity could never be fully achieved when studying culture, because the bias of our own cultural values would always interfere with our interpretation (Trigger 2008, 456-57; Shanks & Tilley 1987, 46-67). Ian Hodder's 'contextual archaeology' embraced this as the material past was seen as only as good as the context in which it was found and that of the person perceiving it (Hodder 1989). In the same year, Shanks & Tilley stated that they, "d[id]n't accept any view of the past" since all will be biased by a modern perspective (Shanks & Tilley 1989, 50). Perhaps most famous is Hodder's treatment of the data from Çatal Höyük, Turkey, where data was posted online to

be interpreted by any viewer, regardless of their level of understanding of archaeology as an academic discipline or social theory (Hodder 2005). Such extremism caused outrage in the archaeological community and Shanks & Tilley's accusation that the New Archaeologists had been the ones to divide theory and practice seemed hypocritical as, yet again, a void separated these two, simply placing the favour this time on philosophy.

The ironic part of these debates is the fact that these approaches to archaeology do share common ground. Both sides agree that it is impossible to discuss archaeological data without using a theoretical framework; that data cannot be recognized as such or linked together without some form of, "mediating interpretive principles"; and that even though this data is bound by the "linking [theoretical] principles", the resulting interpretation is not tied to them and can bring new understanding of the past (Wylie 2002, 174). So it is not so much the way we are interpreting, but the finer details of which criteria are being analyzed and which theoretical principles are emphasized above the others. The Processualists focused on peoples' lifeways: what they ate, how they cooked it, where they lived; and the Post-processualists emphasized how people thought and "dwelt": social interaction and ideology. Each grasps an aspect of human existence, but focusing on only the biology or the humanity of past people results in a detached, imbalanced image.

By the 1990s, the major arguments had been put forth and archaeology had changed, and it was at this point the main flaws of a completely humanistic approach began to be observed (Trigger 2008, 516). Along with this was the impetus of new scientific and technological applications that could be used in archaeology to gain new forms of data to support theory (Brothwell & Pollard 2001, xix; Trigger 2008, 540). The development of residue analysis, using mass spectrometry, was underway (Evershed et al. 1990). Improved AMS dating, allowing for margins of error in radiocarbon dates to be greatly reduced (Taylor 2001, 26), and isotopic analysis, enabling past diet to be gleaned, were increasingly used to answer new questions (Sealy 2001, 272). Moreover, the first studies, focussing on ancient DNA, extracted from bone collagen, were done in the late 1980s (Brown 2001, 301), and the development of more sophisticated computers and programs to manipulate data made it possible to do larger-scaled projects and more intricate statistical work.

Today, in the second decade of the 21st century, we are well beyond the explosive arguments of the Processual/Post-processual debates, and are in a time which is more optimistic than

ever before. We understand that biological and ecological aspects of human experience, as determined through scientific enquiry, are just as important as theorising why people thought the way they did, organized their society the way they did, and how they understood the world and their place in it. In 1990, Conkey argued that the main reason that new approaches to materials were doomed to fail in unlocking the secrets of the past was that each theorist first rejected all methodology that had come before to explain why their methods were superior (Conkey 1990). As a consequence, any merit that might have been in the other approaches were lost in an act of the ego. But today we stand in a position where we can acknowledge past work without the political implications that it would have had twenty years ago. We have inherited the knowledge of both ideologies and are able to look back at the merits and weaknesses of each, and we have the freedom to choose how to approach archaeological problems without having to choose one side of an ongoing argument.

Considering Ceramics within this Framework

The Importance of Style

The study of archaeology developed during a period in Europe when nationalism was at the forefront of thought and the need to legitimize the ownership of land made the search for ancestral cultures a primary focus (Dietler & Herbich 1998: 232). The wars of the 18th and 19th centuries and the expansion and imperialism of Napoleon and the colonisation of new lands made the assertion of contemporary culture essential to its survival in Europe. It was believed that the artefacts found on sites reflected the remains of specific cultural groups who shared a common genetic, linguistic and material background (Lucy 2005: 86). Any change to the archaeological record could only be caused by the expansion of the home group and it was believed that homogeneity could be used to link current people living in those locations to the past as the descendents of those archaeological cultures. It was Kossina who, in 1895, first developed the theory that culture areas could be found by the patterns of artefact types and this was then used to explain the history of the living groups in the same area (Lucy 2005: 87; Jones 1997: 25). Cultures were seen as static, single and bounded entities and so similar artefacts found in two places were thought to have been left by groups in the same ‘culture’. Other than the natural evolution that occurs to cultures over time with innovation and technological advancement, culture endured unchanged, and so histories could be written beginning with the archaeological remains and ending with the present day. Thus for pottery, style was equated with tradition, or ‘type’, and pots could be equated to people, for a unified

style across large areas of the continent (as with Beakers, for example) could only mean a universal culture.

The shift in focus with New Archaeology to socio-economics and Systems Theory rendered the study of style to a secondary position in ceramic analysis (Lucy 2005: 91). Since the focus of the Processualists was on adaptation and the function of artefacts, any aspect of them that was not adaptive or functional was put into the category of ‘style’ (Conkey 1990: 5). For ceramics, this meant the decoration on the pots. The study of pottery focused on formal variation to the end of determining groups’ adaptive strategies and culture patterns and it was not until the late 1970s that the concept of style was once again taken up with the work of Wobst (1977) (Stark 1998: 4).

Wobst acknowledged that style and function were usually contrasted in ceramic studies and style was often seen as too variable to be useful in characterisation studies (Wobst 1977: 317). Individuals could decorate their pots using their own creativity and imagination and so style was too variable and seen to be outside culture (as an adaptive system) (Wobst 1977: 318). Wobst’s thesis was that this may not be the case and decorative elements might be seen as having a function, albeit not necessarily an adaptive one.

One thing that is characteristic of human culture is that we can “symbol” (Wobst 1977: 320). We can relate information and learn beyond the behaviour that is coded to us genetically. Style can thus play as important a role as a messenger, just as the form of the vessel can contain contents. The use of symbols on artefacts creates a longevity for the message, but it also leads to specific ways and events for the message to be transmitted and so artefacts and their decorative style function to create social structures within society (Wobst 1977: 322):

Stylistic messages establish the mutual *bona fide*, in visual mode, before any verbal contact has taken place or in the absence of any verbal contact. In this context, stylistic messaging defines mutually expectable behaviour patterns and makes subsequent interaction more predictable and less stressful (Wobst 1977: 327).

Wobst’s paper in 1977 was important. Until this point, the attempt to understand human behaviour had been solely through technology in a universal sense. This had ignored the cultural dimension of interaction and its impact on variation in material culture (Gosselain 1998: 80-1). Thus, the debate on style really began and the Post-processualists broadened the

theory surrounding it to consider more closely its relationship to identity and ethnicity (Díaz-Andreu & Lucy 2005: 4).

The first to do this was Sackett, who questioned where style can be said to reside within the formal variation discussed by Processualists (Sackett 1990: 32). Sackett claimed that style derives from *isochrestic* behaviour: the options consistently chosen, out of all the ways a thing can be done, by a group in the manufacture of objects that unites that group (Sackett 1990: 33). This can be decorative, but it can also be in the form of the object. Style is thus “ubiquitous” in formal variation and it cannot be studied separately from the characteristics that were previously seen only as functional (Sackett 1990: 34). *Isochrestic* behaviour extends to the choice of raw materials, the ways in which a vessel is made and then how it is used – it is essentially ‘how things are done’ for a specific group. Thus, the choice to conform to these isochrestic choices is no different than conforming to other learned behaviour that is culturally-specific, such as speech, gesture, custom, practice or childrearing (Sackett 1990: 35). “...isochrestic choice, whether conscious or not, is an integral component of cultural life itself” – it is what gives a group its identity and holds it together (Sackett 1990: 35). So in art, painters from different schools can paint the same object, but create paintings that are irreducibly different. On a personal level, isochrestism represents the repertoire of style from which artisans can draw to create their own *vernacular style*. It is in this that personal expression and innovation can create new elements and individuality can be seen in objects, although they still fit within the overarching tradition (Sackett 1990: 39-40).

The Uses of Symbols

Sackett (1990: 36) saw style that is based on isochrestic behaviour as essentially passive, but it could become active if symbols were deliberately chosen to represent that behaviour. In her study of the uses of style by the !Kung San, Wiessner demonstrated that symbols can be used either actively (what she terms *emblemic style*) or passively (Wiessner 1990: 108).

MacDonald (1990: 52) expanded on this by taking a perspective of style that separated its active use to send messages about the individual or group (*panache*) and the style that generally represents the group (*protocol*). It is in the ways that the objects are used and the situations in which they are used that separate these distinctions. “Since patterns of social behaviour vary among particular situations, then it follows that style will also vary among social situations” (MacDonald 1990: 52). This perspective not only sees style as communicative, but also as contextual, and so an object has the possibility of conveying

many messages depending on how it is manipulated. Thus, it can be used to make an individual or group stand out from its peers in an assertive way (*panache*) or simply express the set of actions and rules aimed at group identity in a more passive way (*protocol*) (MacDonald 1990: 55). Wiessner (1990: 108) argued that all of these perspectives demonstrate a slightly different level of comparison in which an element, or symbol, is used to express style. Ultimately, all of these can say something about the identity of the person or people in whose culture that object was made, and it is the purpose of the study to determine which scale to use.

The influence of Wobst created two camps in ceramics analysis in the 1980s and 1990s. The first group saw style as passive and a reflection of social behaviour from a Structuralist perspective, whilst the second focused on style as active and the conveyor of messages (Dietler & Herbich 1990: 238-40). But symbols cannot be read as language; instead, they ‘evoke’ sentiments, ideas and emotions. Many of the Post-processualists tried to simplify style to grasp its complexity of social meanings and this led to the assumption that all style meant to deliver messages when it is improbable that this was the case (Conkey 1990: 10):

This literary metaphor – style *as if* communication – thus encourages and perpetuates both analysis and interpretation that emphasizes style as speaking to us, rather than also encouraging our enquiry into the particular historical contexts of how and why style may have been not just a means whereby social marking may have taken place (as is assumed in the first place), but how and why style *was* social marking in those contexts, and in the particular media, forms, or attributes so observed (Conkey 1990: 11).

Simply because style has meaning does not mean that it bears messages and in respect to archaeological material, even if it does contain messages, it is improbable that we could grasp them since they were never meant for us (DeBoer 1990: 82). So the question that comes out of this with respect to pottery analysis today is: how can we consider the stylistic variation of pots in a way that will inform us about the past?

The Chaîne Opératoire

It is at this place where the concept of the chaîne opératoire becomes particularly useful. The concept of the chaîne opératoire was originally defined as the analysis of a technology, where the production method is broken into its most basic steps. By studying the way a person does each step to arrive at the final product, it becomes “...[une] ethnologie des techniques” (Balfet

1973: 109, quoting Leroi-Gourhan; Audouze 1999: 168). André Leroi-Gourhan first developed this idea in 1943 and 1944 with his publication of *L'Homme et la Matière* and the concept of the chaîne opératoire continued to be used to study technology, particularly stone tools, in the francophone archaeological tradition. The concept of the chaîne opératoire was not described in English until the 1980s and it was not until 1993 – 50 years after its introduction in France – that the concept was translated into English with the publication of *Gesture and Speech (Le Geste et la Parole)* (Audouze 1999: 168).

Leroi-Gourhan's concept is versatile, which allowed it to be developed to suit the study of different types of technology, and so, during the first 50 years, it was developed differently by prehistorians and social anthropologists. Prehistorians, particularly lithic specialists considering Mousterian hand axes, focused on the technical steps needed to create the objects by re-fitting the flakes to the core (Audouze 1999: 169). Social anthropologists focused more on the types of methods used by different groups to create the same object. They compared those methods to consider social differences as indicators of cultural identity. It was about the time that the idea of the chaîne opératoire was finally brought to anglophone archaeology that these branches were united by Lemonnier (1980) in his analysis of stone tools in the salt marshes of western France. Combined, the two perspectives allow for an understanding of the chaîne opératoire on several levels of reality, reflecting past culture.

Technology, the ability and the act of making something, works on three levels as a social action on material: 1) the learned steps (gestures); 2) the characteristics of the finished product; and 3) the conceptual knowledge of the process and product (Lemonnier 1980: 1). In order to make the object correctly, the artisan needs to have knowledge of the ideal forms of raw materials (mental representations and concepts of what materials to use and how to prepare them for use) and a catalogue of actions and gestures with an understanding of the results of these actions on the material (Audouze 1999: 170). They must also possess a conceptual 'know-how' to organise the catalogue of actions so that the production will be successful and they must possess as well the ability to evaluate the actions that have been done at each step and to alter the process at any time if the need arises. Technology thus develops through a dynamic relationship between the methods of production, the material conditions, and the social sphere in which this occurs (Lemonnier 1980: 1). When considered in this light, it becomes apparent that technology is a social fact and its study is as important and informative as the study of other culturally-determined practices, such as diet and ritual.

Boëda (1991) develops this further to create a method to study the chaîne opératoire of lithic remains and to understand the different levels of reality within which technology works. He suggests that the individual flakes and their flake scars must first be considered as the primary step in the process – how each flake was removed and what happened to it thereafter (eg. re-touching). The second step is to refit the flakes to the core to try to recreate the event of knapping that core and to get a sense of the knapper's gestures. Finally, experimentation is done, whereby the event is recreated to test the hypotheses about the methods and gestures and to get a sense of being the knapper and of the practical constraints of the material being used. The importance of the final stage, especially, cannot be stressed enough because it is only through this personal experience that the hypotheses can be confirmed or rejected and that an understanding of the third level of social reality, the conceptual knowledge of process and produce, can be truly appreciated. Boëda's method works with technology because the characteristics of the material will not have changed over time and so problems that are faced by knappers today will be the same as in the past.

When a potter makes a vessel, every aspect of the chaîne opératoire is controlled by the dialectic between cultural values and material constraints, which makes this method very useful when studying ancient ceramics (Lemonnier 1980: 1). Gosselain's (1998: 82) ethnographic work in Africa has shown that every step in potting involves a style of doing things that is learned by imitation and instruction. The 'know-how' of doing something, what Budden & Sofaer (2009:203) refer to as non-discursive knowledge. It is clear with any of the pottery traditions in this research that the potter needed the knowledge and the 'know-how' pertinent to their tradition to produce the pots as they did, and since there are myriad ways to make a pot, it is the consistent choice of one method over all the rest that can tell us about that tradition. In addition, it is changes to these variables that we recognise as the transitions between traditions.

Group Identity and Regionalism

Following the combined technical and anthropological ideas introduced by Lemonnier and the combined method by Boëda, this research has been designed in the following steps: 1) a review of the literature and what is known about the ways pots have been made and are made traditionally (understanding the material constraints and possible cultural choices); 2) examining the archaeological traditions of the region to consider which methods (of all

available) that Neolithic and Bronze Age people chose; and 3) experimental construction of pots to test if the resulting inferences are correct. This knowledge will then form a foundation from which to understand the archaeological assemblage on a regional scale and to consider how ceramic-making changed over time and what this can tell us about the Neolithic and Bronze Age culture.

It was discussed in the prologue of this thesis that group identity forms in relation to other groups in an ‘us’ versus ‘them’ opposition and it is along there that boundaries are drawn as the cultural groups define themselves. Díaz-Andreu & Lucy (2005: 1-2) link this to a sense of belonging, whereby individuals see themselves as part of one group and not the other, a sense that is established in childhood as the *habitus* forms (Jones 1997: 120). Thus, identity on the individual level is tied to that of the group – its ethnicity. Although this is ever-changing as groups renegotiate themselves in their world, and expressions of this in material culture will similarly evolve as situations change, overarching patterns of ‘tradition’ and local expression, as it evolves in its unique way, should be identifiable if the dataset is large enough.

A clear understanding of how the criteria are a result of the chaîne opératoire and how this might express style, identity and ethnicity is what facilitated the structure of this analysis. It is essential to keep in mind that the act of making and using a vessel is the result of social action:

...while archaeologists are often good at describing and categorizing objects in social, technical or typological terms they have been less active in exploring the social reverberations of the production process itself, both in terms of the physical relationship between craftspeople and their materials, and the interaction between craftspeople and people who must have seen them at work – what might be called their audience (Budden & Sofaer 2009: 204).

Thus, the concept of agency was used to consider how these ceramic traditions evolved and what role the individual played in this. The characteristics of pots at the site level allow us to consider people constructing their pots in creative ways, whilst being constrained by their *habitus*. The possibilities of style variation in a ceramic vessel are infinite, but it is the ordered chaos of the cultural constraint of what a pot should look like versus individual choices that allow the individual potter to be glimpsed. It is of particular interest here to also consider the characteristics of specific vessels within their larger tradition since the mixing of traditions and resulting hybrid vessel forms can demonstrate the diverse sphere in which agents were acting. It is with this in mind that the criteria were analysed at different levels,

beginning with the site-level (where possible), then between local sites and finally, within the entire region.

Study Questions

The questions asked of the archaeological material were based on the premise that pots do not equal people, but certain characteristics of them are the result of the choices of individuals making their own decisions within the constraints of their cultural norms (Dobres & Robb 2000, 11; Robb 2001, 2). The consequence of this is that uniform characteristics, which vary from site to site at the landscape level, can demonstrate cultural zones or territories, and at a site-level, individual action. The aim is to be able to identify how people organised themselves in the past, both geographically and how this changed over time, but also to consider individual action at specific sites. Therefore, questions are:

- Which characteristics make up the regional style of each ceramic tradition under study in this area (Impressed Ware, Grooved Ware, Beaker, Food Vessels, Collared Urns)?
- Is there variation within these traditions that might denote individual groups or a specific person at work?
- During the transitional period between the Neolithic and Bronze Age, contemporary to Beaker, can regional expression of national styles be identified in the larger Tyne-Forth region? What is the extent of this? What can this tell us about cultural contact between local people and others from Continental Europe? What sort of cultural contact do Beakers and Food Vessels reflect?
- Is there variation or pattern in the criteria across the study area that suggest individual cultural regions? Are boundaries visible?
- Are there trends at contemporary site types (e.g. henges, domestic sites, etc...) within the Tyne-Forth area?

- Is there evidence that specific construction techniques were used to make a pot that had a particular function?
- Is there any evidence of movement, either of materials to make the pots, or the pots themselves?
- Is there evidence for the mixing of traits from more than one tradition? Can outside influences or innovation be seen within the material's variability at a given site or during a specific time period?
- Is there evidence of the interaction of individuals (eg. teaching, movement of individuals or vessels)?

Current Methods in Ceramic Analysis

Pottery is analysed using techniques that focus on the vessel's composition, function and style. Most ceramic projects implement a combination of techniques to glean as much information from the vessel as possible, but the choice must be made in regards to the questions that are being asked of the material.

Petrology is the study of the lithic inclusions in the fabric of ceramics at a microscopic level. Thin sections are taken from the pot and are examined microscopically to determine its mineral make-up. This method is used to determine the sources of clay and inclusions that past people used when collecting their raw materials. Wardle's (1992) study of prehistoric pottery at Thwing, Yorkshire considered the combinations of inclusions that were selected. Of particular interest was that Food Vessels and Beakers contained higher quantities of quartz, despite its relative rarity compared to other types of aplastics known in the region (Wardle 1992: 104-7). Clay sourcing can also be done by the analysis of diatoms, the silica-based skeletons of life-forms that live in the rivers from which the clay was collected. Gibson (1986b) used this method to show that Neolithic ceramics in the Milfield Basin were made from local clays.

Residue analysis is used to study the encrusted and absorbed residues found in archaeological vessels. Residues form when sealants are applied to the pot surface in the final stages of production, but they can also indicate what sorts of substances were contained during the pot's use. The residues are extracted chemically from the ceramic sherds, isolated and are then analysed using a gas chromatograph (GC) and/or mass spectrometer (MS). Variations of these methods can indicate how the vessel was used and at what frequency.

Provenance studies are the most common method to analyse ceramics. They are variable, based on the criteria that can give the appropriate data to answer the study questions set out in the research design. The questions usually surround the ways in which the pots were made, the form and shape of the vessels, their sizes, the decorative motifs used to ornament them and the placement of these on the pot, the context and associations of the vessel in the archaeological record, its place in the chronological sequence, and the function that that pot had within society. The purpose is to understand the chaîne opératoire and to consider the isochrestic repertoire within a tradition or geographic area. In studies that consider past regionalisation, provenance studies can be very useful, as Cleal (1999) demonstrates with her analysis of Grooved Ware, which indicates variation amidst an over-arching Grooved Ware 'grammar'.

Each of these methods were considered in the designing stage of this project; however, time constraints limited how much work could be done on the vessels. As a consequence, a provenance study was chosen to assess the details of the assemblages and consider the trends in the region as a whole. The purpose of the research was to consider the unity (or division) of a portion of Britain. The Tyne-Forth region was chosen since a study of this type had not been done in this area and because it is the linking region between Yorkshire and Fife, both of which are places with large assemblages of pottery that are well-studied. Since so few vessels remain in this area, though, a broad temporal/spatial scale had to be adopted. This made the thin sectioning of those vessels and sampling of surrounding clay sources an illogical option. Similarly, although a programme of residue analysis in a case study of a smaller portion of the study area was considered, the time and equipment necessary was beyond the scope of the project. It was also felt (in light of Waddington's results for Cheviot Quarry) that it would not lend enough new information at a case study scale to be useful. The criteria chosen for this work was, therefore, deliberately extensive and targeted to answer the

study questions and to create a foundation upon which further study might include the more time-consuming methods.

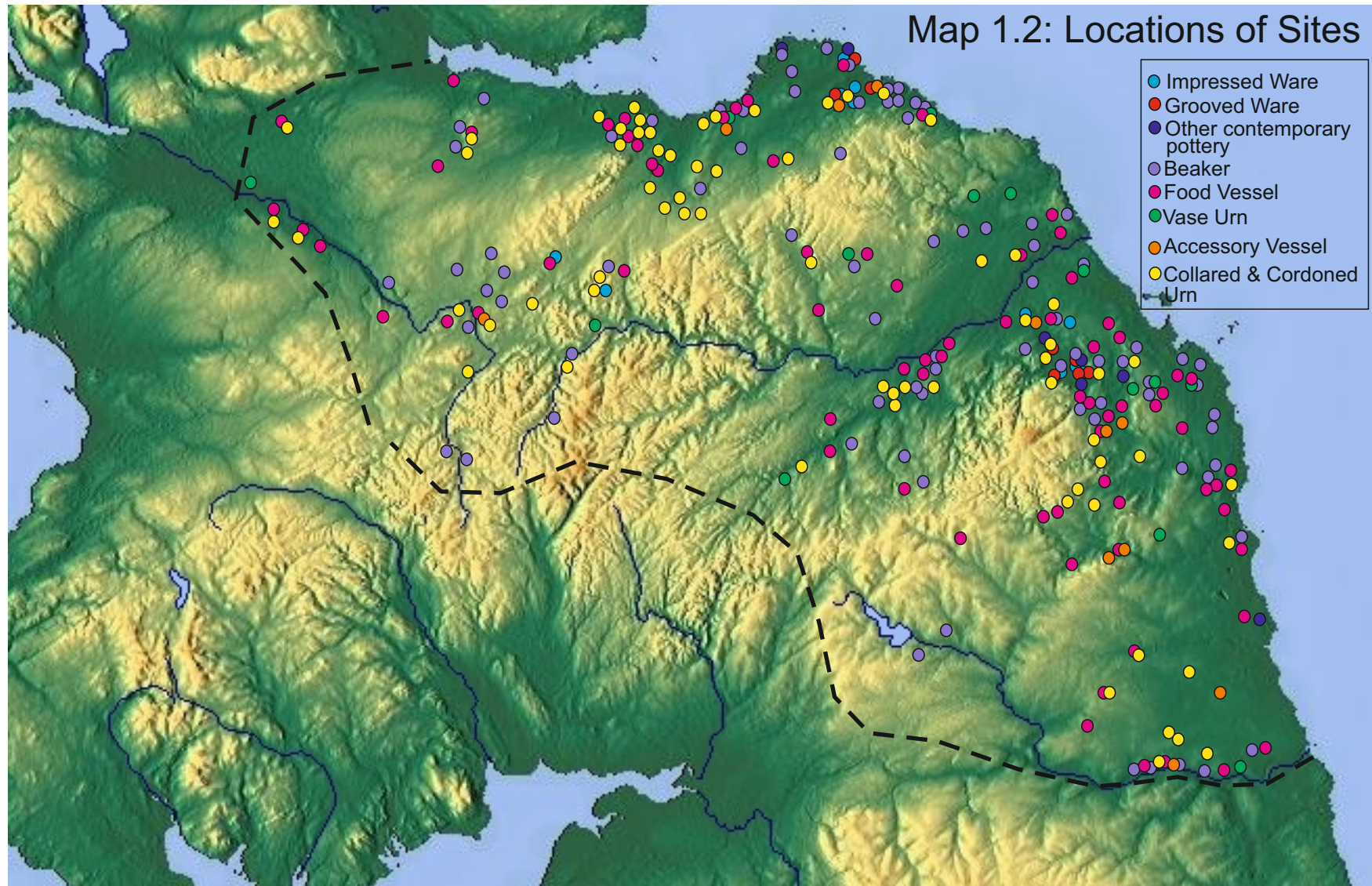
The Criteria

To establish the dataset, all of the academic journals and records were scoured for sites in the Tyne-Forth region that yielded vessels from 3400-1600 cal BC. These include:

Archaeologica Aeliana (AA), *Proceedings of the Society of Antiquaries of Scotland (PSAS)*, *Proceedings of the Prehistoric Society (PPS)*, *History of the Berwickshire Naturalists' Club (BNC)*, Canon Greenwell's *British Barrows (BB)*, etc. The contents of every issue was included in this search, the earliest of which dates to the 1850s. The resulting list was then completed by consulting the Canmore and Keys to the Past website databases, and sent to the appropriate museums with a request for viewing. The vessels came from a good variety of sites from the Neolithic and Bronze Age, including monuments, settlements, burials, stray finds and deposits (Map 1.2). Most were discovered during the 18th and early 19th centuries, but many also came from well-recorded and modern field projects. Some of the vessels could not be found, and others were inaccessible, but a sufficient group of assemblages was available to make this research significant.

All of the sites are listed under their old (1974) county names. This is to make their location clear without the need to constantly refer back to the maps, particularly for the Scottish Borders, which encompass a large area and several former counties. For each assemblage, the form (see Table 1.1 for definitions), fabric (Table 1.2), and surface treatment (Table 1.3) (including decoration, Table 1.4) of the sherds or vessels were evaluated. The shape of the pot's rim, its internal angle and external neck were described, as well as the shape of vessel walls and the base. The bottom was evaluated for its concavity, flatness or convexity, and the presence or absence of a pedestal on

Map 1.2: Locations of Sites



the base was noted. The transition from wall to base on the inside of the vessel was examined and placed in one of three categories: gradual, gradual/abrupt, or abrupt. It was at this time, also, that the surfaces were investigated for evidence of seed impressions, of which many were noted. The dimensions of the pot were determined using plastic sliding callipers. Both the rim and base diameters were measured from their outermost edges and in cases where these forms were oval, rather than circular, both extreme widths were recorded. The vessel height was measured also from the outside extremes, from base to rim. Volume was not determined, but the wall thickness, always recorded from under the rim so that a thickened rim would not obscure an accurate measurement, was taken in millimetres so that the volume could be calculated at a later date, if so desired. Based on these above criteria, the vessel was then recorded within the established traditions and substyles.

The fabric of each sherd was analysed for the types of inclusions used, their prevalence, hardness and quality of firing. Lithic pieces, grog, burnt-out organics, calcite, quartz and quartzite were all identified; however, since this was a macroscopic investigation, using a 20X hand-lens, more detailed information about the fabric was not possible. The results were still informative and useful in determining cultural trends, as described in the analysis in Chapter 6. In Tables 5.1-5.10, the data are recorded to reflect the method used to determine the fabric. The texture is first listed, referring to the 'feel' of the fabric when touched: whether it is coarse, sandy or smooth (clay-rich), and then the density of inclusions was determined using the standard density graph from the Prehistoric Ceramics Research Group. This number does not include exterior slip layers, but does incorporate all of the lithics, grog and organics and sand opposing the clay ratio. The purpose of using a quantitative value to consider inclusion density was to evaluate the fabrics more objectively and so that they could be compared to each other. However, it is acknowledged that the density charts that were used are meant for thin sectioning rather than examination with the naked eye and so they have not been included here. The decision to place a fabric within one category, rather than another, can differ from person to person as the comparison of the fabrics, without a microscope, is subjective. So although the sherds and vessels were comparable in this study since only one person assessed them, the future use of these assignments could result in inaccurate analyses. Consequently, in

the data tables, only the qualitative description, which ranges from clay-rich to gritty, very gritty and extremely gritty, is used.

The lithic inclusions were divided based on colour or type (where identifiable) and measured at their largest length and examined for angularity. The measurement is expressed in millimetres and the shape of the inclusions is described using a range from rounded to subangular, angular, very angular and extremely angular. In some cases the lithics were clearly crushed, creating an irregular form to the inclusion that has sharp angles. Although it is not always possible to know for sure which inclusions were deliberately added and which were originally part of the clay, it is assumed that the most angular lithic inclusions and those that were crushed were deliberately added since they show evidence of processing before their inclusion into the clay. Details of this are noted in the data (Tables 5.1-5.10; Appendices 2-11).

Surface treatment is an over-arching term that includes the handling of the surfaces after the vessel is formed, as well as any decorative motifs and designs impressed onto the pot or applied to it. Each vessel was examined for the presence of a slip, the polished texture caused by burnishing, or striations caused by wiping (either with fingers, cloth, leather, grass, etc...). In some cases, the use of other minerals, used to create colour variation (as is seen in Beakers), was noted in the crevices of the decoration. The decoration of each pot was recorded, describing which types of motifs were used and with which implement they were made. The location of the decoration on the pot was noted, along with any changes around the pot or indications of different individuals (denoted by styles) on single vessels (two of these were found). The terms used to describe the motifs are the standard ones that are listed in Rice 1987 and Gibson & Woods 1997; however, to ensure there is no question of the meaning here, they are listed in Table 1.4. The tradition definitions and substyles used are based on the categories described by Gibson & Woods (1997) for Impressed Ware; Wainwright & Longworth (1972) for Grooved Ware; Needham (2005), Clarke (1970) and Lanting & Van der Waals (1976) for Beakers (each is indicated in the table); Gibson (2002) for Food Vessels; Longworth (1984) for Collared Urns; and Sheridan (2003; 2007) for Vase Urns, Cordoned Urns and Bucket Urns.

Experiments were also conducted to better understand the materials available to potters in this specific region. Replica pots were made using the techniques that have been inferred for this area and were later examined to consider the traces that specific events in the chaîne opératoire might have left on the archaeological remains. It was hoped that this would clarify the variation seen in the data and prevent conclusions that assigned certain characteristics on the vessels (such as striations or breakage points) to human choices when they had actually happened under natural conditions. Residue analysis, as a method to study ceramics, was also explored and it was designed that some of the archaeological material might be tested as a case study for the larger region, but time constraints made this impossible.


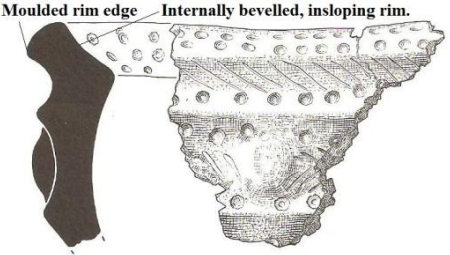
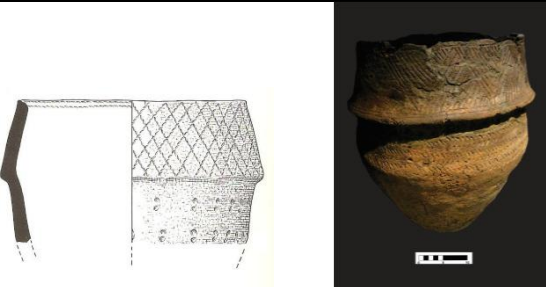
The data collected from the provenance study were used to consider the region as a whole and were analysed in combinations to target the study questions. Radiocarbon dates associated with the vessels, contexts of the finds and associated artefacts were included to place this data within its larger temporal and spatial context. The results were displayed in scatter graphs, maps and tables so that trends could be more objectively recognized. Some of these are presented in Chapters 6 and 7, along with the analysis thereof and the conclusions of this doctoral work.


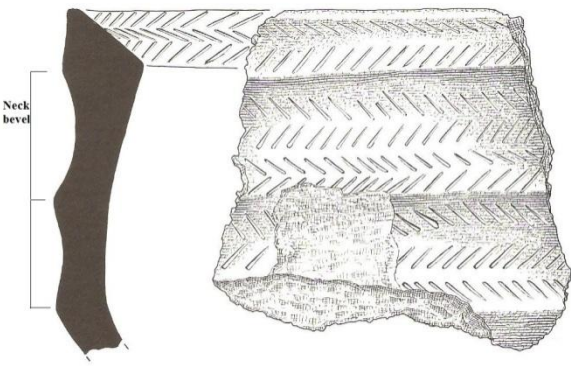
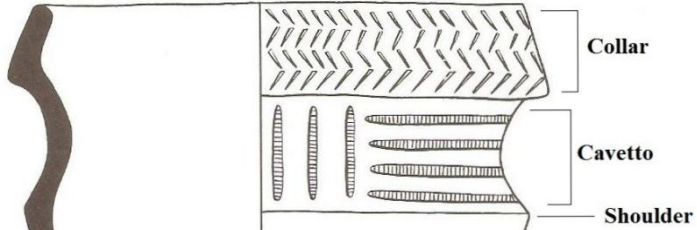
Conclusion

The tiny sherds and partial vessels we uncover on ancient sites are, in many cases, the only link we have with past people and their cultures, and regardless of the enormity of what we aim to achieve, it is in the attempt to find truth in the remains that holds integrity. In order to do this, however, it is essential to critically utilise all of the techniques and applications available to maximise the amount of data that can be measured, whilst still maintaining a hold on the theoretical framework within which we are working. It is with this balanced standpoint that this study has been carried out. Although the result of this work will not fully explain the role of pottery in prehistoric lifeways, it will give us a chance to consider the details of life in the Neolithic and Early Bronze Age. This is the first attempt that has been made to look at all the available vessels and sherds spanning the Later Neolithic and Early Bronze Age over the Anglo-Scottish border and, at the very least, it is bound to offer a new perspective. Coupled with the non-ceramic data from the sites, the residue analysis results from

recent survey and the latest radiocarbon dates, an understanding of the past lifeways of the region will certainly be possible.

Table 1.1 - Form

<p>Simple rim – a rim with straight sides that has a rounded or pointed top without moulding or curvature</p>	
<p>Internally bevelled rim – a rim that has a top surface that is bevelled, often seen on Impressed Ware and Early Bronze Age vessels, and usually accompanying moulding on the rim</p>	
<p>Insloping rim – a rim top that slopes downward inside the vessel. It can be bevelled or flat (see image for internally bevelled rim for example)</p>	
<p>Moulded rim – a rim that has modelled features on the rim whereby clay has been applied or pinched up to create its form (see image for internally bevelled rim for example)</p>	
<p>Collar – a moulded portion of the vessel that has been applied as a separate piece of clay, under the rim and above the neck that usually overhangs the rest of the vessel and dominates the form. Typifies the Collared Urn tradition, but also seen on Fengate Ware</p>	

<p>Rim edge – the flattened edge of the rim that is not part of the rim top, but is separate from the neck of the vessel. In contrast to the collar as it is part of the pot rim and not a separate application and is usually much smaller. Typical to Food Vessels and Impressed Ware</p>	 <p>A cross-sectional diagram of a vessel rim. A bracket on the left points to the flattened edge of the rim, labeled 'Rim edge'. The rim is shown as a dark, solid shape.</p>
<p>Neck bevel – typical of Food Vessel, a concave neck portion of the vessel. This differs from a cavetto as it is less concave and has a straighter vertical axis and is not paired with a collar. Some Food Vessels have more than one neck bevel, creating tripartite and ridged forms. Some cinerary urns have neck bevels that are created by the contrast in wall direction by their applied cordons</p>	 <p>A cross-sectional diagram of a vessel neck. A bracket on the left points to the concave neck portion, labeled 'Neck bevel'. The neck is shown as a dark, solid shape. To the right, a textured, hatched area represents the vessel body.</p>
<p>Cavetto – a narrow neck portion of a vessel that is usually under a collar and is much more extreme than a bevel. It is typical of the Mortlake, Fengate, Meldon Bridge and Ford substyles of Impressed Ware, as well as Collared Urns</p>	 <p>A cross-sectional diagram of a vessel neck. A bracket on the left points to the narrow neck portion, labeled 'Cavetto'. To the right, a textured, hatched area represents the vessel body. Labels on the right side of the diagram include 'Collar' (pointing to the top rim area), 'Cavetto' (pointing to the narrow neck), and 'Shoulder' (pointing to the base of the neck).</p>

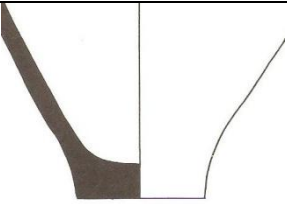

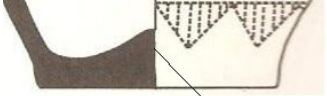



<p>Pedestal – the base of several types of vessels, particularly Fengate Ware, Beakers, Food Vessels and Collared Urns, are often defined by cylindrical mouldings forming pedestals. Presumably, they create a more solid foundation upon which a vase-shaped vessel can stand upon a narrow base</p>	
<p>Transition – the internal join between the wall and base. It can be gradual, gradual/abrupt or abrupt and the base itself can be flat or rounded</p>	 <p style="text-align: center;"> Gradual Abrupt Gradual/abrupt </p>
<p>Central cone – a boss of clay in the centre of the base inside the vessel that is created when the transition is made more abrupt by smoothing the clay around the edge of the inner base. This was sometimes then pressed down to make the base flat, but especially in Beakers, the rise was left in the centre</p>	 <p style="text-align: center;">Central cone</p>
<p>Coil join – when a vessel is built using coils or slabs, the joins between these in the walls sometimes are not smoothed well enough over to cover the meeting point and a coil join can be seen. In profile, these are usually on a diagonal axis even though the coil will have been placed on horizontally because of the direction that the wall was built up afterwards</p>	

Table 1.2 - Fabric

<p>Inclusion – a material other than clay that is found in the clay matrix. This can be something that was deliberately added as an opening agent or something that was naturally in the clay that the potter decided not to remove. Materials used as inclusions in the study area include: lithics, calcite, quartz, quartzite, organics (straw, chaff, dung, seeds, grass), shell and grog</p>	 <p>Natural inclusion: shell or seed?</p>
<p>Grog – previously-fired clay is often crushed up and put in new clay in preparation to make a pot. It acts as an opening agent since, as the surrounding clay dries, it contracts from the grog pieces, leaving room for expansion during subsequent heating. As a result, there is less spalling during firing and cooking</p>	 <p>Grog</p>

Organic inclusions – dung, straw, grass, chaff and seeds are examples of organic inclusions that are added to clay, which burn out during firing and thus create voids in which the clay can expand when it is heated during cooking. The effect of dung temper can be seen on the surface of pots and burnt out organics appear as black burnt-out areas in the clay matrix, which gives the overall fabric a corky appearance. Seeds often leave their shape in the clay, which can be seen if the wall of the pot breaks in the right place

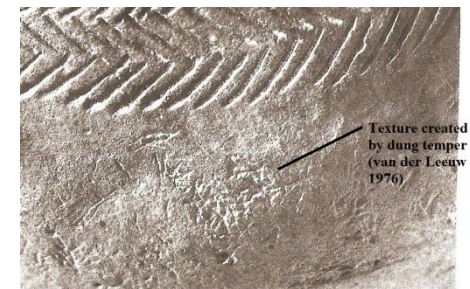




Table 1.3 – Surface treatment

<p>Slip – a slip is made by mixing clay with water insofar that the clay particles lie in suspension in the water on the molecular level. This can then be applied to the pot by dipping, painting or pouring it onto the vessel at the leather-hard stage. It does not penetrate the surfaces of the clay, but rather, creates a barrier on the surface that, to some extent, seals the vessel and forms a smooth surface. Pots are slipped for this purpose, or to create a smooth working surface for decoration or to achieve a desired colour. A slip can vary in thickness and is so evaluated in this research with the categories of thin (barely visible), moderate (visible, but does not fully cover inclusions), heavy (covers all inclusions and fabric) and very heavy (covers fabric to extent that it is another layer in the matrix and usually shows cracking that formed during drying).</p>	
<p>Wiping – many vessels demonstrate striations on the surfaces from wiping on the surfaces. This in itself can act to seal the pot walls, depending on the composition of the clay, so that the vessels stays intact during drying, firing and use. Wiping is done with many materials, from fingers to cloth, leather, grass and straw. On the assemblages in the study area, impressions of blades of straw were noted on vessels with heavy striations. In cases of lighter striations, the same effect was achieved in the experimental work by smoothing the clay with the finger pads.</p>	

1 | Theoretical Framework and Approaches




Burnishing – is a form of smoothing that involves a hard, smooth object, such as a river stone, to smooth the vessel walls, usually at the leather-hard stage. It creates a different surface effect than wiping as, instead of striations, the surface has a dull sheen and is more consistent in texture. It acts the same way as wiping or slipping in that it creates a uniform surface on the vessel, in effect sealing it, so that it performs better in drying, firing and cooking











Scraping – some vessels, particularly Beakers, were scraped on their inner surfaces to thin the walls after construction, thus making a more delicate pot. Striations are usually quite clear when this has been done.






Table 1.4 – Decorative motifs



<p>Comb – the impressions of comb are typical of Beaker, but they are also found on Food Vessels occasionally. Patterns include lines, cross-hatching, herringbone, diamond shapes and x-shapes. The combs are square-, rectangular, and round-toothed and are surprisingly uniform in tooth shape and size. Sometimes the length of the comb can be discerned by the arch of the impression, or overlap of impressions, if they are in straight lines.</p>	
<p>Twisted cord – one of the three types of cord impressions in the study area, twisted cord impressions is thought to have been made by wrapping cord around a stick, twisting it into a ring or simply twisting lengths of it and then pressing it into the clay. The strand thickness was measured from either side of the diagonal impression where it met with the adjacent impression.</p>	
<p>Whipped cord – differs from twisted cord because the cord is wrapped more tightly in an upright direction. This forms rows of vertical oval shapes in the clay when it is impressed. The thickness of the strand was measured at the midpoint of the impression.</p>	
<p>Plaited cord – is a cord that has been braided and then impressed into the clay, which creates a vine-like pattern. A similar effect can also be done using false plaited cord, whereby twisted cord is impressed in parallel rows in opposite directions to one another, which forms pairs of oval shapes that point in opposite directions.</p>	

	 <p>Plaited cord</p>	 <p>False plaited cord</p>
<p>Grooving – is done by pressing a hard tool with a flattened end into the clay and dragging it along to form a line or shape. It is a form of incision, but is distinguished here because of the flat shape of the end of the tool used. It is the decorative motif that gives Grooved Ware its name, but Grooved Ware uses many other decorative motifs as well and grooving is seen in all of the traditions.</p>		
<p>Incision – uses a pointed tool, which creates a narrower groove in the clay with more slanted walls. When done haphazardly, it creates slashes, which are most often seen in parallel rows on pots in the study area.</p>		

<p>Maggots – are short cord impressions that are made up of 2-3 twists of cord (more if the cord is tightly woven). They are usually set in rows, often off-set to one another, or as infill to another impressed shape or pattern.</p>	
<p>Zigzag – is defined by three or more opposing diagonal lines that are attached or nearly attached at their ends. It can be made up of opposing rows of herringbone. Zigzags are set horizontally or vertically in the traditions in this study. They are made using cord, comb, incision, grooving and maggots.</p>	
<p>Herringbone – is made by two rows of opposing, diagonal lines that create chevrons. It can be set vertically or horizontally on the vessel and is common in all of the traditions. Herringbone was observed on vessels that had been decorated using comb, cord, incision, grooving and maggots.</p>	
<p>Lattice – is a pattern made by rows of horizontal and vertical lines that create a mesh design. This was done through the traditions using impressed and grooved methods and is most common as a fill to another shape (usually a square or rectangle).</p>	

1 | Theoretical Framework and Approaches

<p>Cross-hatching – is a pattern like lattice that is composed of parallel lines that are placed in opposing diagonal directions to make a mesh design. It is often used as a fill to another shape, but is especially prevalent in panels in its on right on Beaker.</p>	
<p>Stabmarks – are made by pressing a pointed object, such as a stick or bone, into the clay, but not perforating it. In a few cases, the object is square-ended and this variation is indicated in the data.</p>	
<p>Cordons – are raised decorative motifs that are either applied as a separate cord of clay or are pinched up from the vessel wall. They are especially common in the Woodlands, Durrington Walls and Rinyo substyles of Grooved Ware and Cordoned Urns, but are seen on some Collared Urns and on Fengate style Impressed Ware also. They are commonly placed in lines, but on Grooved Ware, horizontal or vertical cordons are sometimes grooved in a ladder pattern, as seen at Yeavering, Northumberland.</p>	

<p>Lugs – are pellets of clay that are applied to a vessel or are pinched up from portions of the vessel wall to form bosses or handles. They are common in Grooved Ware as a decorative motif, particularly in the Rinyo style, but are also found on Food Vessels acting as ridge stops in the neck or shoulder bevels. Lugs that do not have holes drilled through them are called false lugs and are thought to be a more decorative representation of the perforated lugs that could have had string set through them to support a handle or covering for the vessel. Both of these sub-types are represented on Food Vessels.</p>	
<p>False relief – most common in Food Vessels, impressions with a stick are used to create a false relief pattern, in most cases this was zigzag in the study area.</p>	

CHAPTER 2: PREHISTORIC CERAMIC MANUFACTURING METHODS

Introduction

Making and firing a pot requires knowledge of clay and its properties – how to build and model the vessel, how to process the clay before firing, and an understanding of the firing process. It is not something that can be learned immediately, but takes instruction and much practice, and even the most experienced potters lose pots to the fire. The quality of the prehistoric archaeological material found on sites in Britain demonstrates that the people who made ceramics understood the materials of their craft. This is not to say that pottery was made on an industrial scale, indeed, there is no evidence for industry until the Late Bronze Age (Henderson 2000: 142-7; Gibson 2002b: 36), but that prehistoric potters could design and manipulate their materials to meet new demands.

To glean the most information from the pots, it is important to consider pottery only in the context of the greater archaeological dataset. Ceramic studies need to be placed in their archaeological context and ceramic specialists need to have a keen understanding of the geology, chemistry and geography of their material, an awareness of the many choices available to the past potters and how traces of these can be discerned from the pots. It is because every stage in the chaîne opératoire, from the collection of the materials to the construction techniques to the ways the pots were used, reflects the culture of the person who made it that these details are important to archaeologists. Thus, the scientific techniques we have to analyse the sherds can provide a great deal of information about past human action, foodways, technology and land use and traditional provenance studies of assemblages continue to be fruitful with evidence for local and regional trends, experimentation and individuality. So it is with a detailed understanding of ceramic properties and processes, experimentation and ethnography that the best pottery studies are conducted and the chaîne opératoire is identified.

Although the study of ceramics is a specialised area within archaeology, pottery is so ubiquitous on sites around the world that it is necessary for most archaeologists to have some understanding of clay and its properties. Prudence Rice's (1987) volume on pottery remains an invaluable and unparalleled resource. The chemical and mechanical properties of pottery

and the methods of its study are extensively covered. In addition to this, Dean Arnold's (1985; 2005) ethnographic research on ceramics and the models he has developed to apply this knowledge to archaeological remains continues to be an important source for archaeologists working in the field. Although he takes a Middle Range Theory approach, Arnold's perspective is not fully Processual and he maintains a primary focus on the relationships between individuality, agency, tradition and culture. It is from the foundation set by Rice and Arnold that many ceramics specialists in anthropology and archaeology have written about the cultures within their study area. This research represents one of those types of study. Thus, following the tradition led by Rice and Arnold, this research begins with a full understanding of the materials, then gains insight into the ways they can be manipulated via ethnographic records, and finally, applies this information to the archaeological material.

Clay Acquisition

The Geology of Clay

Clay is the primary raw material in pot-making and knowledge of where to find the best clays and how to process them is pivotal to successfully produce a pot. Using the wrong clay can result in the dysfunction or destruction of the piece. Rice (1987: 36-39) describes clay most generally as: "...a fine-grained earthy material that becomes plastic or malleable when moistened". More specifically, clay is distinguished from other types of soil because it has a particular particle size (smaller than $2\ \mu\text{m}$ in diameter), contains a particular fraction (35%) of certain minerals (namely silica and alumina). Almost all rocks were originally igneous (volcanic), but they often undergo manipulation and reform into metamorphic rocks (formed by heat or compression) or sedimentary rocks (transported and redeposited, often with other rocks) (Henderson 2000: 110-112; Rice 1987: 33). Although clay is usually from sedimentary deposits, metamorphic and igneous rock minerals are found as well.

Clays used for potting are usually divided into primary (residual) and secondary (sedimentary) categories (Gibson 2002b: 34; 2002a: 37; Rice 1987: 36; Henderson 2000: 112). *Residual clay* refers to clay that is found where it formed geologically. It tends to be very pure with fewer, but large and angular, pieces of the parent material (Rice 1987: 37). This is because its decomposition is never complete so residual clays are usually coarse and

aplastic with up to 90% of the deposit consisting of quartz, feldspar, mica and pyrite. Residual clay requires higher temperatures and a very controlled environment to fully fire, this is something prehistoric people would have been unable to achieve without kilns. Prehistoric potters had knowledge of the existence of residual clay; for example, at the Bronze Age settlement of Legis Tor on Dartmoor, it was used to mend holes in pots (Worth 1967), but for the most part it was neglected for more suitable secondary clay.

Sedimentary clay is clay that has moved since its original deposition, usually by water in rivers and streams (Gibson 2002a: 35; Rice 1987: 37). It is more homogeneous and has a smaller particle size, since in the act of moving, the smaller particles will have travelled with more ease whilst the larger pieces will have stayed behind. This same action, however, also enables lighter organics to be collected along the way and so sedimentary clays are often rich in organics with natural organic inclusions comprising 5-10% of the clay (Gibson 2002b: 35; Rice 1987: 37). This makes them more malleable, and it is easier to fire them without kiln technology. It is for these reasons that prehistoric pots were usually made of secondary clay, whilst primary clay was used for repairing breaks or lining a surface (Gibson 2002b: 34).

The Chemical Composition of Clay

It was not until the 1930s, with the invention of the electron microscope, that it was determined that clay is composed of rock-forming minerals (Rice 1987: 43). Since then, a fine understanding of clay on a chemical level has been refined, which can explain the varying behaviours of the material during the stages of potting. Raw potting clays are highly variable in their composition and properties. This is caused by the environment in which they form and the contexts in which they weather. All clays are composed of silicate rocks containing silica (SiO_2), alumina (Al_2O_3) and water (H_2O) (Rice 1987: 34). On average, these are at a ratio of 46.6 % silica, 39.4 % alumina and 13.9 % water (Rice 1987: 40). However, the way in which silica, oxygen, aluminium and hydroxide atoms bond leave the molecules electrically unsatisfied. This means that they are left with unused 'arms' that bond to other elements present in the surrounding soil that have an appropriate static charge, for example: iron, titanium, calcium, sodium and magnesium. There are 50 combinations possible, but the result is dependent on the chemical composition of the surroundings (Henderson 2000: 113).

In addition to this, over time a clay deposit will ‘weather’ and various proportions of sodium (Na), potassium (K) and calcium (Ca) leach out, leaving the insoluble elements, iron (Fe), silicon (Si) and aluminium (Al) in a higher proportion (Rice 1987: 36). The extent to which this changes the clay is based on the climate of its location. For example, humid, tropical areas tend to produce red clays since a greater amount of the soluble elements leach out, leaving a higher proportion of iron. These two situations (formation and weathering), therefore, produce myriad clay types. Each of these will have differing properties and will need different inclusions (or no inclusions at all) to survive the shaping, drying, firing and function of the vessel a potter wishes to produce.

The Colloidal System

Although ancient potters will have not known the chemical reasons for their preference for certain clays over others, they will have been aware of the physical properties that resulted from them. These include plasticity and shrinkage. Plasticity is perhaps the most important of these two as it affects the very essence of making a pot – whether it can or cannot be formed and hold that shape. Plasticity is based on what Rice (1987: 54) calls the ‘clay/water system’. It is a colloidal state, as that of blood, where haemoglobin platelets are suspended and move within the blood serum (Henderson 2000: 112; Shepard 1965: 13). When water comes into contact with clay, it forms partial (weak) bonds on the surfaces and edges of the clay particles. Since they are of lamellar (platelet) shape, there is much surface area for the water to attach and the particles end up with a thin film around them, which allows them to slide over each other more easily (Rice 1987: 59; Henderson 2000: 110, 115-119). Therefore, the smaller the clay particles are, the more plastic the clay will be. This, however, has an inverse relationship with the surface tension of the clay particles. The surface tension of the clay particles enables them to be pushed about without coming apart; however, if too much water is added, the surface tension will lower, causing the clay to break down (Rice 1987: 62). Plasticity can also be increased by adding acidic substances, such as yogurt, beer or starch, to alkaline clays, or by aging it so that bacteria can act upon it, which stops the surface tension being affected by a surplus of water (Rice 1987: 3).

The clay/water system is what makes pottery formation possible. Since water forms weak bonds the clay is malleable, but also because the bonds exist, albeit only as dipoles, the clay is able to hold its shape once it is formed (Rice 1987: 58; Henderson 2000: 110). As the vessel dries, the water around the platelets evaporates – a process that is referred to as the *mechanical* loss of water (Rice 1987: 63). The structure of the clay particles contracts and it is at this point that shrinkage and cracking occurs. Once fired, the shape becomes permanent and the plasticity is eliminated.

The Human Side of Potting

Clay as a natural resource is highly erratic and the ways in which people procure, manipulate and use it is similarly variable. All groups agree that the best quality clay should be sought, but the definition of this can vary between groups and even individuals (Gosselain & Livingstone 2005: 40). Much of this has to do with intended function, for example, certain clays are collected for beer bowls by the Achuar and Quichua of Ecuador that have less natural sand included, but they are considered unsuitable for pots to brew beer (Bowser 2005: 26). In Sub-Saharan Africa, finer clay is preferred to make babies' baths so their skin will not be scratched by protruding inclusions (Gosselain & Livingstone 2005: 41). There is a common belief in many cultures that if the clay collected is not the 'right' type, then the pot will not survive, even if it should chemically. From their study of the potting methods of over 1000 potters in 100 linguistic groups in Africa, Gosselain & Livingstone (2005: 40) describe choices made by potters as a mixture of the economical and technological, but also the social and symbolic – what Henderson (2000) calls the 'cultural factors' (referring to Wright 1986 and Kilikoglou et al. 1998). Most groups have a very narrow belief in how clay should be collected and prepared and think that theirs is the only way it can be done well (Gosselain & Livingstone 2005: 41).

There are four geographic sources from which clay can be collected: from the surface, dug from a pit, from an underground gallery, or from under water (Gosselain & Livingstone 2005: 35), and the tools used are often non-specialised and 'borrowed' from the agricultural toolbox. Arnold's (1985; 2005) analysis of 117 groups in the Americas has shown that there is a "threshold distance" people are willing to travel to get good clay. Most collect their clay

within a kilometre of home, whilst others will travel up to 4-5 km, but none of the groups studied would go further than 7 km on a regular basis (Rice 1987: 116; Wardle 1992: 19; Arnold 2005: 16). Similarly, Gosselain & Livingstone (2005: 35) report that in Africa, none of the groups they studied travelled further than 3 km and even then, most collected enough for an entire season at one time. Tiv women, from Nigeria, were reported as having travelled 25 miles for their clay because this clay was of exceptional quality, but this appears to be a rare example (Bohannon & Bohannon 1958: 302).

In some cases, clay sources are shared between groups, but in other cultures, specific people or lineages have rights of access (Rice 1987: 116). In southwest Niger, a new clay source was found by the Zarma village and was immediately shared with three other villages despite its value as an exceptionally good clay (Gosselain & Livingstone 2005: 33). In some groups, the sources are very secret, as in Bangkok, Thailand (Rice 1987: 115), whilst in others the locations are known, but ownership is highly respected. Quichua and Achuar women own the sources they find themselves, and these can be passed down to their daughters, but other women are not allowed to use them without permission. They will walk up to 50 km out of their way to new sources to avoid a debt to the owner (Bowser 2005: 26). The Gisu of Uganda see the ownership of a clay source as with any other resource and a potter simply buys the clay from the person who owns the land on which the source is found (La Fontaine 1959: 22).

It is because so many things can go wrong whilst making and firing a pot that the collection of clay is often highly ritualised. In many cases, members of the opposite sex are not allowed near clay sources and in others, only those who are initiated may be present (Rice 1987: 115). Specific behaviour is often taboo, such as swearing or spitting when the clay is being extracted, whilst other actions, such as chanting or singing, are required for the clay to perform well in vessel-making (Gosselain & Livingstone 2005: 40). In the Azera culture of Papua New Guinea only married women who have not yet had children may collect clay (Rice 1987: 115). Among the eastern Toradja in Indonesia women cannot argue, laugh loudly or make any undue noise whilst collecting clay, lest the pots break (something the eastern Toradja regard very negatively and that causes them to shudder) (Adriani 1951: 478-80). The Toradja also aim to appease the spirits by paying for the clay with a coin or a piece of foil that is placed in the bottom of the hole from where the clay had been taken.

The Zulu of southern Africa have many restrictions to ensure success in potting. To make sure only the 'clean' come into contact with the clay, it cannot be collected by a woman if she is menstruating or has recently given birth or the entire clay source will be spoiled forever (Raum 1973: 274). The pots are then made in an especially-constructed hut near the potter's hut in which no unclean person can enter and in which no one lives.

When clay was collected by the Tsonga in South Africa, a group of women went to the source, but only one woman could dig the clay and then hand it to her company. The clay was then stored under a tree to weather and no one in the village was allowed to walk over it (Junod 1927: 115). When it came time to fire the pots, the lead woman would choose a child, a symbol of purity, to light the fire and if the firing was successful, that child would be employed as the fire-lighter from then on (Junod 1927: 115).

In Uganda, the Ganda believed that clay should only be dug after a full moon and pots could only be fired after a new moon (Kagwa et al. 1934: 159). And amongst the traditional Navajo, only men could dig clay since there was a taboo against women disturbing the earth, although the women made the pots (Newcomb 1940: 41).

The ethnographic record demonstrates the variability of ways that groups think about potting and how greatly this can affect their behaviour and traditions. It is these differences that make those cultures unique. As with anthropology, the aim of archaeology is to understand the dynamics of culture and, ultimately, what this can tell us about humanity. Thus, it is a frustrating fact that it is improbable that archaeological research will ever be able to grasp the sort of detail that these records possess. However, the ethnographic records are valuable. From them, we can acknowledge all stages in the chaîne opératoire are closely tied to culture. There may have been significant meaning attached to specific stages or they may simply have been considered daily work. Importantly, these practices and ideas may have differed across space and time even if the pots that were products of this, appear similar enough to fit into the categories we have defined as ceramic 'traditions'.

Processing and ‘Tempering’

The processing of the clay and either adding or removing inclusions is perhaps one of the most variable steps in the potting process and one of the most elusive to archaeologists. Once the clay has been acquired, the potter must make sure it is of the correct composition to work with, to hold its shape during drying, to stay intact during firing, and to fulfil its function effectively as a pot. There has been some argument regarding the terminology of the material found in or added to clay. The term ‘aplastic’, ‘inclusion’, or ‘opening material’ are all used to describe material put into clay (Gibson & Woods 1997: 32; Gibson 2002b: 35).

Traditionally, ‘temper’ (in North America) or ‘filler’ (in Britain) was used to describe the material that was added, whilst ‘tempering’ referred to the action of putting the material into the clay (Rice 1987: 407-8; Gibson & Woods 1997: 32). But none of these is truly sufficient to fully describe what it is supposed to mean. Aplastic does not take more malleable things into consideration, such as dung, organics and grog; inclusion and temper do not describe what they are meant to do; and none of the terms distinguish between deliberately added materials and those that are naturally occurring in the clay (Gibson & Woods 1997: 32).

Indeed, ceramic technological choices are so variable and culture-specific that an understanding of how groups were manipulating their materials can help identify their individuality and distinguish them from other groups. For this reason it is important for reports to be consistent. Therefore, the term most commonly used today, inclusion, will be used in this thesis, but with the acknowledgement of its weaknesses.

A great trouble for ceramic specialists is determining the difference between naturally occurring inclusions and those that were deliberately added by the potter. This is particularly acute when considering organic inclusions. Grass and moss can easily be found in clays naturally, and straw, seeds and chaff need not necessarily be included purposely. Simply being near the clay whilst it is being processed is often enough for it to get mixed in (Sestier 2005: 83). In many cases, seeds get pressed into the base of the vessel when it is placed on them; evidence of this is especially prevalent on Beakers and Collared Urns and has been used to argue that it demonstrates a greater reliance on farming in the Early Bronze Age compared to earlier times. Archaeologically, all organics will appear in the pot fabric as burnt out areas in the ceramic matrix and only in cases where impressions remain will the fibre that it once was be discernable (Sestier 2005: 82). And yet, organic inclusions are used around the

world and so it is not absurd to assume they were more widely included in clay in the past. Clearly, it is a part of fabric studies that needs to be developed methodologically.

To distinguish between natural and deliberate inclusions, more rounded lithics are often thought to be natural, whilst angular ones that demonstrate deliberate crushing, are seen as humanly added, but this is not always true (Rice 1987: 409-11). Grog (crushed fired ceramic) will obviously be a human addition, as will straw, chaff and grains – the latter remains in a finished pot as burnt out areas that create a ‘corky’ texture, as seen at Wether Hill, Northumberland (Gibson 2002b:36). Naturally occurring inclusions can also include gravel (lithics with diameters of 2-4 mm), stones, sand and silt. Diatoms, the silica-based skeletons of micro-organisms that live in streams are also found naturally occurring in clay (Gibson 1981; 1986b; Henderson 2000: 111). Due to their chemical make-up they survive firing, and their presence can be used as a marker to determine the clay source for a vessel.

Although there are some clays that can be used immediately upon extraction, most clay needs some processing (Rice 1987: 118). It is common for clay to be dried, crushed and sieved to remove impurities and often it is left to ‘weather’ for several weeks or years (Rice 1987: 122). Deliberately added inclusions are then mixed into the clay, either while it is wet or dry, depending on the potter’s recipe. Around the world, these include myriad materials, including: crushed stone, quartz, quartzite, calcite (limestone), flint, grog, chert, shell, calcined bone, chaff, grass, dung, straw and seeds. Lithics range in size from sand (<0.5 mm) to small pebbles (>10 mm). In some cases, salt is added to reduce spalling in calcite-rich clay (Rice 1987: 119; Henderson 2000: 130). However, it is also known in some places that nothing is added to the clay. Bohannon & Bohannon (1958: 303) reported that the Tiv women they spoke to were shocked to hear that other potters around the world added anything to the clay since they did not need to do this with the clay they used. Also, in Ethiopia, the Amhara simply mix three different types of clay, according to a certain recipe passed from one generation to the next (Messing & Bender 1985: 83).

The Purpose of Inclusions

The purpose of adding inclusions is to help the pot dry, to reduce shrinkage and to lower the breakage rate during firing and the strongest pots tend to have inclusions of a variety of

shapes and sizes (Rice 1987: 66, 74). While the pot dries and the mechanical water evaporates through the pores of the clay matrix, the inclusions serve to hold up that matrix and keep the pores open. This causes the pot to dry faster as the water has more places to escape and it also enables the pot to hold its shape. During firing, the molecular water (that which is bonded to the clay particles) escapes as steam and the inclusions (holding the pores open) provide a means for this to occur safely. Without these pathways, the steam would build up pressure and cause parts of the pot to ‘pop’ off, or spall (Figure 2.1) (Rice 1987: 87). In some cases, the entire pot may explode. Gibson (1981) describes his experiences of this in experimental firings as so dramatic that one sherd was propelled up to 3 m with a trail of steam behind it. Organic inclusions behave in a similar fashion. Experimental work by Sestier (2005) demonstrated that mixing chaff and moss in both good and bad potting clays made both more malleable for potting and easier to dry.



Figure 2.1: The middle vessel shows a weak point on its side where it has spalled.

The presence of inclusions also reduces thermal shock in a vessel during use. When a pot is heated for cooking, it expands slightly and when it cools, it contracts to the original fired dimensions (Rice 1987: 118). Particularly during rapid heating, this can cause the pot to crack if there is not enough room internally for the expansion. The inclusions, by keeping the pores intact, allow for this movement, thus reducing breakage during use. Experiments by Bronitsky & Hamer (1986) demonstrate that finely ground lithics and burnt shell, in particular, are useful for this purpose.

Arnold describes a similar “threshold distance” for inclusion material as for clay, although in many cases, people will not travel as far since suitable tempering materials are more easily obtained than is good clay (Arnold 2005: 16). Ethnographically, it is seen that clay processing

is as variable and ritualised as clay acquisition and choices do not always reflect functional purposes. Although potters are very specific as to what should be done to make a good clay, this, again, varies between groups and individuals. To make this even more complex, Gosselain & Livingstone (2005: 42) note that even within the constraint of tradition, some individual changes are still made as potters learn different techniques from others or try new techniques to solve specific problems. Thus, the potting tradition of any culture is not a static practice, but a dynamic and ever-evolving craft. For example, during the Late Woodlands period in the Great Lakes area, a time when full-scale farming was finally adopted, pots were suddenly tempered with limestone (Hoard et al. 1995). At first this change seemed counterproductive because calcite inclusions cause fired pots to spall at temperatures above 600°C and will therefore increase the breakage rate during firing (Hoard et al. 1995: 824; Carlton 2008; Henderson 2000: 130; Shepard 1965: 29-30). However, experimentation has shown that it also increases thermal shock resistance since it allows for finer vessels with thinner walls to be made (Hoard et al. 1995: 830-1). At this point in prehistory, when people were cooking more regularly on the fire, a greater need for a vessel that could be re-used many times without cracking, and could heat food faster with its thinner walls would have been a great innovation.

It is perhaps for this reason that fabric analysis is so important for understanding archaeological ceramic material. The consistency of the material added to the clay is a major part of what constitutes a 'tradition', but it is in the smaller individual choices, the changes made to solve the problems so that the pot would work better in new contexts as its role changed, that the transitions between the traditions occur. What we see archaeologically is a culmination of the accumulated changes, but with a better understanding of how the clay was processed in the first place, we can get a better view of the changing nature of the culture overall.

Techniques in Pot Formation

There are several ways to hand-build a pot including: pinching, coiling, slab construction and moulding (Rice 1987: 124; Gibson & Woods 1997: 37). Pinching employs the force of the

fingers and the thumb opposing one another to draw the clay into a cylindrical shape. Usually, a ball of clay is formed, the thumb is inserted into the ball to create a centre, and then the sides are pinched as the ball is rotated with the other hand (Figure 2.2). The size of the pot this method can produce is limited to the size of the potter's hand so it is generally used to create a solid base for a pot that is then built up using another method.



Figure 2.2: Building a pot by pinching.

To construct a pot by coiling, long, 'snake-like' pieces of clay are rolled and then attached to



Figure 2.3: Building a pot by coiling.

the walls of the pot to increase their height (Figure 2.3). This is usually done so that the lengths of clay spiral upwards to the top of the pot and so that there are fewer weaker places where the coils were joined and they are more evenly distributed around the pot. However, this is not always so as some groups, such as

Berbers in Morocco cut each coil to the required length to go around the pot's circumference only once (Coon 1931: 74). The joins are then smoothed with the fingers or with a smooth paddle or stone to make the attachment firmer (Rice 1987: 127-8; Henderson 2000). The Amhara make coil-built pots following the same method used to weave baskets (Messing & Bender 1985: 84). The joins are then smoothed with any material close at hand, including: a piece of wood, bamboo, a sherd, corn cob, leather rag or cloth. The coiling method is visible in archaeological material because the places where the coils attach form weak points that break more easily. Gibson & Woods (1997: 39) remark that, although coiling was a predominant method in the Neolithic and Bronze Age in Britain, the ancient potters were clearly not able to eliminate the weakness of the coil joins and so many of the pots have more breaks there than in other places. The joins are also visible in pot cross-sections. These are particularly interesting since, based on the curvature of the join, it can be determined how the pot was smoothed (Figure 2.4). One type of join, well-known in prehistory, is the diagonal bevel, or 'tongue-and-groove' (Gibson & Woods 1997: 38). This is found extensively on British Neolithic and Bronze Age pottery, as

well as contemporary wares on the Continent; however, experimental work by modern potters has, thus far, been unable to reproduce it, which leads Gibson & Woods (1997: 40) to conclude that it represents a “lost technology” of construction. In slab construction, clay is made into thicker coils or shorter slabs, cylinders, or tubes, and joined on top of one another to build up the pot walls (Rice 1987: 125). It is probable this was more extensively used in the past as it creates fewer joins and, as a result, fewer weak points in the vessel. It also builds the pot up faster and so is a more efficient method. Evidence for this type of construction can be identified where join breaks are found in vertical orientations. Finally, moulding is done by pressing the clay around a template for the pot, such as a wooden bowl (Figure 2.5). In Udaipur, India, griddles are made in this fashion by paddling the clay over the base of waste jars from previous firings (Rice 1987: 126). Similarly, in western Sudan, Mossi potters dug a hole in the shape and size they wanted their vessel to be and then smoothed and pressed the clay until the desired thickness was met (Mangin et al. 1921: 70). This technique often leaves one side smooth where the clay has pressed against the mould, in contrast to a rougher,

Figure 2.4: Differing coil joins made by the direction of movement whilst smoothing the join (from Gibson & Woods 1997: 3)

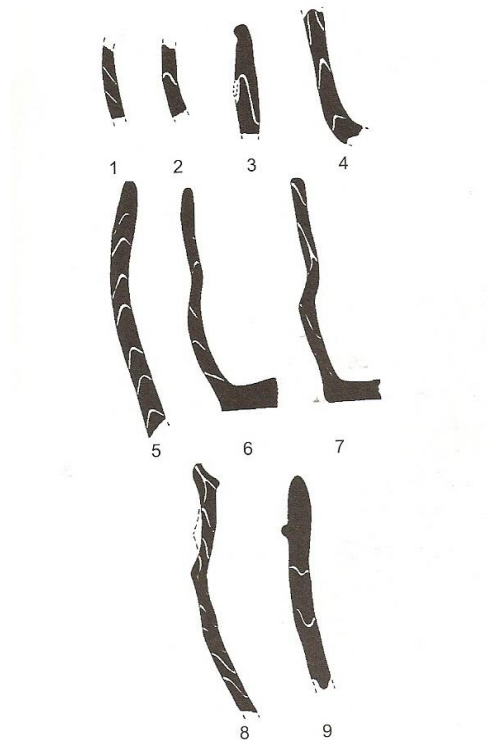




Figure 2.5: Moulding a pot in Udaipur, India
(from Rice 1987, 126)

opposite side where it was pressed, beaten or scraped (Rice 1987: 126). The historic Iroquois sometimes used a method that combined moulding and coiling where coils were moulded around a gourd and smoothed to the right thickness (Lyford 1945: 49c). The entire vessel, along with the gourd, was then fired until the gourd burned

away and the pot remained.

In practice, most potters will use a combination of these methods and, although there are some indicators, such as the breaks at the ring joints, cross-section patterns, or varying textures, that indicate a particular style, many times it is difficult to detect exactly how a pot was formed. Potters in the past will have made their pots using learned methods typical of their tradition, and comparing the construction methods of different traditions can be useful in understanding how traditions changed and evolved, especially because changes may have been made based on the intended function of the vessel being produced and to suit the materials available at that time. Modern potters often choose their methods based on the ‘feel’ of the clay and their knowledge of the performance characteristics of a certain form or fabric and this intrinsic knowledge is one which will not show up archaeologically, yet it is what we try to determine from the sherds. It is for this reason that experimental work and close relationships with modern potters are essential when studying ancient ceramics.

The Relationship Between Form and Function

There is much in the literature regarding the form of pots and how this relates to their intended function. Rice (1987: 225) identifies four use-related properties that are related to form: capacity, stability, accessibility of contents, and transportability. Most of these analyses are useful and very practical. For example, a larger, straight-sided vessel may not have been

useful for transportation since it would have been heavier, but it would have had the capacity and stability for storage. A round-bottomed vessel is better for cooking because it suffers less from thermal expansion, as it has fewer edges, and there is less use-wear when food is stirred in it (Rye 1981). However, it is useful to caution that these conclusions tend to rely on the forms of pots we use today (jars, cups, beakers, bowls, etc...) and this can influence and prejudice our interpretations. The fact that we call those pots that spread across Europe and into Britain in the second millennium BC, 'Beakers', has led to the conclusion that they were used for drinking. Indeed, at many sites across Europe, residue analysis has revealed that the Beakers contained alcoholic substances, such as mead or beer. At Ashgrove (Fife), pollen analysis of an encrusted residue within the vessel had high levels of *Tilia* (lime), a honey pollen, which led to the conclusion that it had held mead (Tipping 1994: 137). It is of interest that *Tilia* is not native to Scotland and so the contents must have been imported. Traces of mead were also found in a Bronze Age birch-bark bucket from Denmark and at La Cazadilla, Spain, residues of beeswax in a Beaker may also have been left by mead (although Guerra-Doce concedes that the wax may have been a sealant) (Guerra-Doce 2006: 248, 251). Elsewhere, in Spain, residues of beer have frequently been found in Beakers (Guerra-Doce 2006; Rojo-Guerra et al. 2006). This has evoked interpretations of the entire period that include images of a Beowulf-like society centred on a male drinking cult (Burgess & Shennan 1976). However, in Britain, Beakers are most often found as offerings in funerary contexts, whilst vessels on domestic sites differed in shape, size and form, and even on the Continent, the presence of alcohol in Beakers is correlative only to funerary contexts (Guerra-Doce 2006: 251). This is not to say that form has no relationship with function, but simply that the characteristics that we place significance upon may have not been intentionally designed by the potter (Rice 1987: 347). Moreover, a pot may have had many uses during its life and performed them as effectively as was necessary regardless of the fact that their form may not have been optimal or obvious for that function. For example, in southeast Spain, some Beakers have been found that were used as crucibles in copper-smelting at the end of their lives (Guerra-Doce 2006: 252).

Surface Treatment

To finish the vessel, the surfaces are often beaten, scraped, burnished or trimmed (Rice 1987: 136). It is best to do this during the ‘leather-hard’ stage when the pot is dry enough to hold its form through such treatment, and the surfaces are still wet enough to change under it (Gibson & Woods 1997: 45). The most common beating technique is done with a

paddle and anvil where the paddle (usually a flat stick) is slapped on one surface whilst a convex

stone or clay anvil is held against the other surface (Rice 1987: 137). This strengthens the bonds between joins. Scraping is also common in coiled, moulded and pinched pots to thin and smooth the walls. This method is frequently visible in the upper portions of Beakers where it was employed to achieve a desired wall thickness, a technique that was also used in the urn traditions of the Bronze Age, but was not common in earlier Neolithic pots (Figure 2.6). Other surface treatments include burnishing, where the pot is smoothed with a hard, smooth object, often a river pebble (Rice 1987: 138), but simply brushing the pot with a handful of grass, straw or other similar material is common (Rice 1987: 140). Beakers sometimes display this where the impression of straw was left on the pot’s external surface.



Figure 2.6: Scraping inside the Beaker from Twizel, Northumberland.

Open-fired ceramics tend to have rougher surfaces because coarser clay is necessary for them to survive quick, hot firings, so slips are usually used to cover up erupting inclusions. Slips usually comprise finer, purer clays that are mixed with water so that they can be poured over the pot or the pot can be dipped (Rice 1987: 150; Gibson & Woods 1997: 66). It is common for the slip to be put on the pot when it is dry, and just before it is fired, but this is not always the case as decoration is frequently applied or incised into the pot through the slip whilst the clay is still soft enough to take the impressions (Rice 1987: 150). Slips are identified on archaeological vessels because they form an outer clay layer on the vessel that is usually visible in cross-section and creates a uniform, smoothed surface. The surface differs from those that were simply wiped because a slip has a better coverage and sometimes a different colour and texture than the rest of the vessel.

Decoration as a Surface Treatment

The broad term, decoration, is reluctantly defined by Rice as the, “...embellishment of a vessel beyond the procedures used in forming the clay mass into the final vessel shape and finishing its overall surface”, although this is really not sufficient (Rice 1987: 144). Some decorative motifs clearly do not have functional purposes as far as the vessel’s performance is concerned, but in some cases the texture incised onto the pot was done to give a better grip when lifting it or to create a better heat transfer for cooking (Pierce 2005). However, dividing motifs into functional and non-functional groups may simply create a dichotomy that did not exist in the past. In many cultures today this continues to be true. Our concept of something that is ‘functional’ is really more akin to something ‘mechanical’ or ‘technical’, but the motifs found on pots that do not alter performance may have been seen to be just as functional, simply in non-technical ways. Decoration on pottery is, therefore, a broad subdivision of surface treatment designed to enhance the vessel, either aesthetically, technically, or both, and as a step in the potting process that is as important as clay processing or drying. In this sense, choosing to change the surface of the pot with decorative motifs (or to leave it plain) is akin to the ways in which the clay is processed (eg. whether inclusions are added or removed) and how the pot is fired.

The ways in which pots are decorated are divided into those that are applied *onto* the surface and those that are applied *into* it (Rice 1987: 144). The former refers to pigments that are painted onto the pot and pieces of clay that are applied to it, such as roundels, handles, bosses, lugs, cordons and pellets. The latter is a more varied category that includes: incision, grooving, stamping, impressing, carving and perforating (Rice 1987: 145-7). Although some specialised tools are known to create certain motifs, such as the roulettes that were used as personal seals in Mesopotamia, potters around the world are known to use many objects from their fingernails to shells to knives to sticks to create different effects. Indeed, in modern, Western Europe and North America, a hairpin attached to a stick is frequently used as a tool to incise, groove and trim a pot.

The decorative techniques used on prehistoric pottery in Britain largely fall into the category of those applied into the pot (Tables 1.1-1.4). These include grooving and incision in herringbone, cross-hatching, lattice, zigzag, and linear motifs as well as many types of impressions. Stamping, birdbone, twisted cord, whipped cord, plaited cord, pseudo-plaited

cord, comb, fingernail and fingertip impressions were all used in different combinations according to tradition. Some pots have perforated holes near the rim or perforated lugs around the neck of the vessel, suggesting that they may have had rope handles or may have been suspended. Characteristic of the Grooved Ware tradition, but certainly not limited to it, are decorative elements that were applied onto the pots, including: lugs, pellets, bosses, roundels and cordons.

The meaning of decoration on pots is well-documented and argued in the anthropological and archaeological literature and it is discussed in Chapter 1, but to highlight the complexity of this topic it is essential to stress that in the potting traditions known ethnographically, the use of decoration can range from simple aesthetics to signifiers of a particular message about ownership, function or the individual who made the pot. The Hopi were well-documented to have a highly symbolic and controlled repertoire of motifs used for all forms of art (Beaglehole & Beaglehole 1937: 57; Brew 1979: 517). Among the Zulu, water pots were not decorated, whilst beer pots had geometric designs incised into them and pots that were used for cooking meat had blackened surfaces (Raum 1973: 274). These differences helped to distinguish between pots so that a water pot was not accidentally used to cook meat, which would be unclean. For the Igbo, in Nigeria, pottery is much more functional and a variety of undecorated, decorated, black, white and terracotta-coloured vessels are made for the same purpose, to collect water (Basden 1966: 177). Among the Luo in Kenya, it is not the motifs themselves that are symbolic, but the entire pot, including its function as a vessel that can transform substances into life-giving things. For the Luo, “the pot is a product of the woman’s creativity and it embodies her womb as a life-giving container” (Geissler 2000: 668).

Drying and Firing

When the potter has completed the forming and treatment of the pot, it is left to dry – a process that can take days, or even weeks (Rice 1987: 152), but this is not permanent and a pot that seems dry will still reconstitute and lose its form. This is because drying a vessel in the air or near a heat source only releases its mechanical water – the water that coats the clay particles that gives the clay plasticity. For the pot to permanently hold its shape and be useful

to hold liquids or keep materials dry, it must lose its molecular water to become fully vitrified. This is referred to as undergoing the ‘ceramic change’ and it can only be done by firing the pot (Gibson 2002a: 34). Today, there are three ways in which pots are fired: in bonfires, hearths and kilns (McDonnell 2001: 95). A bonfire is the simplest method, but can only reach lower temperatures and is highly influenced by the weather and wind. A hearth is similar, but allows for more control as it is usually located indoors or sheltered by a structure or wind-break (McDonnell 2001: 96). Kilns are much more effective since their external structures allow for the control of fuel, temperature and shelter from the elements (McDonnell 2001: 97). Kiln firings have much higher temperatures that can be held longer and allow for the fire to be kept separate from the pot so that the heat is more evenly dispersed and the entire pot fires evenly. They require much more specialisation and are typically found with groups that produce pottery on a larger scale; there is no evidence of firing superstructures such as these until the Iron Age in Britain when the first mass-produced ceramics were made (Gibson 2002a: 45).

In all of these contexts, the success of the firing is reliant on the atmosphere, the temperature achieved and the duration that temperature is maintained (Rice 1987: 80). The ‘atmosphere’ of a firing refers to the presence or absence of certain gasses. The most important of these for the appearance of the pot after firing is oxygen. Where there is ample access to oxygen, the atmosphere is said to be ‘oxydizing’ and the pot tends to have a natural and even colour on its surface, but if there is a lack of air, the atmosphere is ‘reducing’ and the pot ends up with smoke clouds or black patches where the carbon has been unable to escape (Rice 1987: 81; McDonnell 2001: 95; Shepard 1965: 80-83; Henderson 2000: 131). In an open fire, there are many variables that can affect the outcome of the firing. The atmosphere can change, literally, with the wind, and so within a single firing, some pots may be in an oxidizing atmosphere whilst others are in a reducing one. However, this does not mean that prehistoric potters had no control over their fires. There are methods to ensure a reducing atmosphere, such as covering the pots with a combustible material, such as straw, grass or sawdust, that will burn, but keep oxygen out (Rice 1987: 158). To create a reducing atmosphere for a black finish, Malay potters submerged red hot vessels from the fire into a container of grass and husks and sealed it, much like the raku method known today (Winsteht 1925: 23). In Senegal, the Wolof fired their pots covered in dung, woodchips and grass (Lasnet & Schutze 1900: 21), and the Iroquois would cover their pots with black coals to seal the firing

atmosphere when a dark colour was desired (Lyford 1945: 50a; Morgan 1901: 6). Indeed, the consistent black surface found on the hard and well-fired 'Traditional' Carinated Bowl pottery in Britain suggests an extensive knowledge of firing and how to manipulate the variables of it to achieve a consistent colour, texture and high quality pot.

The temperature at which pots are fired is what separates them into the classes we use today. Earthenwares are fired at 900°C - 1200°C, whilst stonewares are brought to 1200°C-1350°C and porcelains to 1400°C (Rice 1987: 82). Much of this has to do with the type of clay that is used, which determines at what temperature it will make the ceramic change and this can affect what type of fuel is chosen to fire it (McDonnell 2001: 94; Henderson 2000: 141). For example, hardwoods burn longer and hotter than softwoods and pine resin will create a heat greater than other softwoods. Consequently, using these types of wood would be ideal to slow the firing process and create a higher temperature, or to create a final hot 'flash' to vitrify the pot's surfaces. However, even with hard woods, open fires are unable to reach temperatures much greater than 900°C (Gibson 2002a: 45; Henderson 2000: 135). This would have limited the options for prehistoric potters. Most potters around the world use wood to open fire their pots, but other materials, such as dung, straw, husks and coal are used as well (Rice 1987: 157; Sillar 2000).

Bonfires can be used to fire one pot or several stacked on top of one another – it is entirely dependent on the size of the fire (Rice 1987: 157; Henderson 2000: 135). The pots must first be heated to ensure the mechanical water has evaporated so that the pots will not spall. It is estimated that the absorbed surface water will be eliminated by the time the pot reaches 200°C-300°C, but this must be done slowly to give it time to reach the surface of the pot and burn off (Shepard 1965: 81). This



Figure 2.10: 'Smoking' the pots before firing. Note the change in colour where the heat is drying the pots.

‘smoking’ is quite often done by placing the pots near the fire and then moving them closer and closer to it over several hours until they are actually in the flames (Figure 2.7). The molecular water then begins to evaporate through the pores of the pot, which is when the ‘ceramic change’ occurs. Once this is complete, the pot is vitrified and will not be able to regain the molecular water and turn back into clay (Rice 1987: 87; Henderson 2000: 135). Bonfires, however, are uneven and temperatures are difficult to control and maintain so open fired pots are not always evenly fired or completely vitrified to the core.

The Chemistry of Firing

The process of firing a pot acts as a catalyst for several other chemical reactions within the clay matrix. Impurities, such as carbonates, sulphates and sulphides (calcite, dolomite, marcasite, pyrite, gypsum and salts) burn out and migrate to the surface where they burn off into the air (Rice 1987: 88). Fairly early, at about 200°C, organics in the clay begin to carbonise and the carbon moves out to the surfaces of the pot where it burns off and is released into the air as CO₂ or CO (Rice 1987: 87). The level of completion of this reaction is dependent on the amount of O₂ present that can bond with the carbon and so in reducing atmospheres, this carbon will contribute to the pot’s black colour. The carbon have ample time to reach the surface of the vessel and so in open firings, which tend to be very quick and

hot, it is common for the carbon to not fully volatilise and so the pots usually have distinctive black cores (Figure 2.8).

The carbon is not fully eliminated until temperatures of 600°C-750°C are reached, which does not always occur (for very long) in open fires (Rice 1987: 88).



Figure 2.8: The black core of the Vase Urn rim of EE 134, from Luffness, Lothian, demonstrates a fast, hot firing.

At $573\pm 5^{\circ}\text{C}$, quartz – a mineral found naturally in clay (SiO_2), but also often added to clay as an inclusion – undergoes its first metamorphosis (Rice 1987: 95). At this point, as molecular water and organics are burning off the pot and the clay is shrinking, quartz expands at about the same rate, and it is for this reason that it is such a desirable inclusion. Its expansion maintains the integrity of the clay matrix and thus inhibits cracking or ceramic breakdown. At higher temperatures, it will dissolve completely, which can cause cracking, but it is rare for a bonfire to become hot enough for this to be a concern (Rice 1987: 96).

Feldspars are the second most common natural inclusion found in clays (Rice 1987: 96). They are minerals made up of K, Na or Ca and are silicon-based. At higher firing temperatures (above 1150°C) they melt into a thick liquid and form dense areas in the clay matrix, to create a stronger, denser body that can withstand greater impact (Henderson 2000: 134); however, in open-fired pots they tend to act more as opening agents such as the quartz-based minerals.

The third most common natural inclusion that reacts during firing is calcium (Rice 1987: 97). Calcium carbonate, in the form of limestone, calcite and shell, and calcium sulphate, or gypsum, are often added to clay. Perhaps the most famous use of calcium in modern pottery is the addition of calcined ox bone to fine clays to make bone china (Rice 1987: 97). The benefit of this is that the calcite holds the clay together more effectively so that thinner walls can be made, but during firing, if temperatures above 1000°C are not achieved, as is common with open-firings, then atmospheric water can be absorbed into the calcite to form quicklime (Henderson 2000: 134-5). This then heats up with the chemical reaction and expands, causing cracks to occur in the pot's fabric and compromises the structural integrity of the vessel, which increases the chance of spalling and breakage (Rice 1987: 102; Carlton 2003: 27). For open-fired vessels, adding salt to the clay, or soaking it in seawater, can reduce the chance of this, but these methods do not always work.

In the Western Balkans, as many places around the world, calcite is predominately used as an inclusion to create pots with thinner walls that will allow for better heat transfer during cooking. In Dalmatia, much effort goes into using calcite as an inclusion and consumers will pay more for a calcite-tempered pot (Carlton 2003: 24-26). Calcite is easily crushed and has a similar thermal expansion coefficient to clay so that it makes the clay easier to manipulate,

and provided it survives the firing, the thinner walls make it a better cooking pot (Carlton 2003: 27). Upon removal from the fire, red-hot pots are plunged into a bath of water mixed with flour and bran that effectively seals them. Experimental work by Carlton (2003) has demonstrated that pots sealed in this way do not crumble later on as with those that were unsealed because the atmospheric water cannot penetrate the walls of the vessel to react with the calcite. Thus, the pot benefits from thinner walls and the structure the calcite allows, but does not suffer from the drawbacks of using calcite as an inclusion (Carlton 2003: 30). This act of sealing the pot is a process called ‘docking’, which is often used in coarser, open-fired potting traditions to make the vessel better for use.

Sealing a Pot

Open fired pottery tends to have coarse fabrics and upon use, these pots can absorb liquids, causing food to take longer to cook or result in the pot’s inability to store products such as milk, water and beer. As a consequence, the use of substances to seal (or dock) a pot is very common (Rice 1987: 163). In western Africa, locust tree pods are boiled and the water is splashed in freshly made pots; in Ethiopia, pots are sealed in the same way as baskets, with yeast and resin, or by heating milk in them (Rice 1987: 163; Messing & Bender 1985: 84-5). Carlton (2003: 30) notes that a particularly fatty meal is first cooked in new pots in Dalmatia – a practice similar to that in Papua New Guinea and by the East Toradja in Indonesia, where yams, cooking bananas and other waxy vegetables are boiled in pots first (Rice 1987: 164; Adriani 1951: 481).

Archaeologically, sealants are very difficult to discern since it is difficult to distinguish between many of these docking substances and the remains of food processing. In many cases they could be both: a sealant made by a certain meal chosen for this purpose. Traces of the ways prehistoric potters fired their vessels are similarly scanty. Gibson’s experimental firing demonstrated that the remains of bonfire firings or pit firings would not be anymore unique than the pits and hearths we find on Neolithic and Bronze Age sites (Gibson & Woods 1997: 58-9). The black cores, uneven colour and uneven firing of the archaeological remains all support the negative evidence for kilns and indicate that Neolithic and Bronze Age pots

were open-fired (Rice 1987: 88; Gibson & Woods 1997: 52-3; Gibson 2002a: 36; Gibson 2002b: 46); however, the finer details, such as those known ethnographically, remain elusive.

Constructing an Image of the Past

Based on what is known ethnographically, it is probable that potting, and particularly the act of firing pots, was wrought with ritual, superstition and symbolism as it, almost magically, turned one substance into something else:

There is a tension here, however between the knowledge of fire as a destructive hazard and the appreciation, also from an early period, of its various positive qualities; as a source of warmth, light and cooking heat, for example, and as an agent for hardening wood, splitting rock and searing wounds...because of this ancient precarious tension between creation and destruction, the phenomenon of fire remains enigmatic and continues to stir the human psyche. It retains a magical, metaphysical quality...[and]...arouses a certain awe and changes the event with added significance...the creation of useful tools which a raging fire can not consume or fracture stands as a metaphor for human interaction with, or power over, nature (Carlton 2003: 19).

In the modern, Western world, we have lost our concept of the importance of fire, but in other places around the world, and indeed, before our time in Europe, fire was essential to the survival of people. When controlled, it allows food to be made edible, farmland to be fertile and it provides heat – something of particular importance in colder climates. However, fire can also be destructive and deadly: it can destroy homes, forests and kill people and animals. Thus there is a paradox that makes fire both a ‘life-giver’ and a destructive force.

It is within this paradox that pottery is made. A piece of earth, moulded into shape, is put into a fire and, instead of being destroyed, it becomes a useful tool and is virtually indestructible. Therefore, its survival makes it stronger. However, it is only through the control of fire that this transformation can take place and so to do this, it is common for the liminal stage between clay and pottery to be surrounded by ritual and taboos. For example, when a water jar is made by a Hopi woman, a small replica is thrown in the fire as well to appease the spirits with an offering (Beaglehole & Beaglehole 1937: 57). Ganda women, in Uganda, can only fire after a new moon (Kagwa et al. 1934: 159), and amongst the Gisu of Uganda, it is

taboo for certain people to pass by the fire, such as those who have lost their immediately older sibling, those who are twins or the mother of twins. In many cases, such as the Wolof of Senegal (Lasnet & Schutz 1900: 21), only those castes that specialise in the control of fire can make pottery and so it is often the wives of blacksmiths who have this occupation.

The significance of the transformation of clay to pottery is especially important among the East Toradja in Indonesia and fired ceramics are seen as having a strengthening force that runs through them that they obtain from surviving the fire (Adriani 1951: 481). For this reason, sherds are stuck into the ground where landslides have occurred or where a river is threatening farmland and they are ground into powder and put on children's scrapes and skinned knees to heal them faster. The East Toradja place great significance on fired ceramics and, since they have an unusual power to survive fire, they are treated carefully for fear of the affect that this unleashed power might have on the people. Thus, pots cannot be made whilst someone in the household is ill because, as the vessel is formed, that person's body will swell and they might die (Adriani 1951: 478). Moreover, if a pot breaks whilst it is being made, it signifies that someone in the household will die as well. This connection between pots and people, intertwined in a much closer relationship than other forms of tools, is found elsewhere as well. In Kenya, the Luo associate broken pots with death and they purposely break pots over graves (Geissler 2000: 668). Even in our own culture, the language used to describe pots parallels them to human beings. A pot has a foot, a belly, a shoulder, a neck, a lip and a mouth (Leach 1976; Rice 1987).

The connection to women

Although there are examples of cultures where men make ceramics, in most of the ethnographic literature, it is the women who are the potters. Sinopoli's (1991) research demonstrates that when pottery is produced at the domestic level (as it was in Neolithic Britain), it is usually done by women and it is not until production is at an industrial scale that men take over. It is probable that the connection between women and potting is simply a practical one. Pots are used to make food and gather water, which are traditionally women's roles, so the making of these tools is simply an extension of these tasks, just as the production of stone tools by men is an extension of hunting. It is probably this obvious division of labour

that has caused a philosophical connection to be made between women and pots, rather than the other way around.

Moore (2000) links women to pottery through their association with fire and the female role as the keepers of the hearth. A common theme exists throughout the world in mythology, where fire was originally kept by a woman in her womb, a 'life-giving' substance within a 'life-giver'. In each story, it is by man that fire is stolen and brought to the people, but only by woman that it can be kept under control and used to give life (Moore 2000: 125). In Greek and Roman mythology, this deity, Hestia or Vestes, is a virgin, but she also symbolises maternity. In contrast, men use fire outside the home in less controlled and more destructive ways, for instance, in slash-and-burn farming. Moore (2000: 125) cites the Tukanian culture in Colombia as an example where the domestic fire is seen as female and is associated with birth and menstruation to the extent that, in ritual, men cannot go near the fire or they will be no longer able to produce sons.

Applied to European prehistory, Moore (2000: 128) links these ideas to Hodder's (1990) concepts of the house – the *domus* and *agrios*. Hodder (1990) believes that at the time of the first farming and pottery-making in Europe, a new philosophy was linked to the agrarian lifestyle that focused on a dichotomy between the domestic and wild, between culture and nature. When resources were brought into the home from the outside, they needed to be made into food before people could consume them. Thus, at the hearth, wild resources were processed and made into cultural food. Similarly, wild earth was taken and formed into a vessel shape, but only at the hearth, the woman's domain, was that vessel transformed into a domestic, cultural tool (Moore 2000: 128).

Within the ethnographic literature, however, where a philosophical connection between women and potting is made, it is often more direct than Moore's interpretation. Many cultures make a three-way connection between the 'life-giving' nature of the earth used to make the pots, the women who made them and their fertility, and the pots themselves that serve to make food. Thus, making a pot and creating something from nothing is a natural part of the life-giving quality of women and the resulting pots can, in turn, affect this nature. Consequently, Luo women of childbearing age eat earth for fertility and only mature women who have given birth make the pottery (Geissler 2000: 668), and when Hopi women decorate

a water jar, the top must be left plain to ensure easy childbirth for that woman and the survival of her children (Beaglehole & Beaglehole 1937: 57).

Both Moore and Hodder's conclusions demonstrate the difficulty in using ethnography when studying archaeological remains. Too often, the temptation to apply the data directly to the past becomes a starting point for interpretation. As mentioned at the beginning of this chapter, ethnographic data is useful to show the variability of cultures, but just as cultures differ around the world today, so too will past cultures have been different. Ethnographically, we know that women are usually the potters, but this is not universal and it may not have been common at all in prehistoric western Europe.

Conclusion

This chapter was designed to consider what Sillar & Tite (2000: 4) regard as the five areas of choice in pot-making: raw materials, tools, energy sources, techniques and sequence. An understanding of clay, its properties and the steps necessary to create a vessel is essential when trying to gain information from the products. Thus, the study of potting processes is useful insofar that it helps researchers determine which techniques the people did and did not use, which narrows the possibilities and displays their choices. From this basis, reasons for these choices, both cultural and functional, can be inferred.

As archaeologists, it is more than the classification of types that we seek. We use ceramics as a medium through which to view past action, interaction, beliefs about the world and individuality. Arnold (1985: 8) observed that the way in which potters create ceramics is more Platonic than Aristotelian. In most places, potters do not think of the specific attributes of the pot they wish to make in compartmental form, but rather, they have an image of a complete prototype in their head, which they attempt to reproduce. So, to grasp what the pots can tell us about the group that produced them, we must use aspects observed in the chaîne opératoire to consider the function and then attempt to go beyond them in the interpretation of the whole.

The sherds and vessels we uncover on archaeological sites are the physical remains of the choices potters made. These reflect the tradition in which they potted, which in turn was

developed by the culture in which they lived, but their own innovation and ability in their craft will be present. The prehistoric assemblages with which we are presented in Britain are often frustratingly small and given the ethnographic record, it is clear that there are aspects that we will never be able to grasp; however, a clear comprehension of the styles and how they changed over space and time can provide a starting point. It is in the deciphering between tradition and innovation that the individuality of the potter may be gleaned, either by makers' marks or by a consistency of choice that goes beyond the overall ceramic tradition. Although this is difficult to discern, it is not impossible. The repertoire of analytical methods to see the finer points of these choices and the ethnographic record to bring it to life continues to grow. Thus, in the study of these pots we have the opportunity to learn more about the Neolithic and Bronze Age, and perhaps, gain a more detailed understanding of the past.

CHAPTER 3: POTTERY TRADITIONS IN BRITAIN, C. 3500-1500 BC

Introduction

Pottery was produced in Britain in the Early Neolithic, predominately of the Carinated Bowl tradition (Bayliss et al. 2011: 840). This coincided with the introduction of domesticated plants and animals and a more sedentary lifestyle in the Early Neolithic. The knowledge of how to construct these hard, well-made, round-bottomed vessels was brought to Britain from Continental Europe and they are found in abundance on sites from southern England to northern Scotland. The focus of this thesis; however, is the indigenously-developed pottery from the Later Neolithic: Impressed Ware, Grooved Ware, as well as those from the Early Bronze Age: Food Vessels and Collared Urns, and the enigmatic Beakers and other contemporary vessels found on domestic and ritual sites that lie somewhere in between (Chart 3.1). Although this seemingly leaves out an important ceramic tradition and the earliest form of the material in Britain, it is argued that Carinated Bowls are of an age very different to that of the pottery in question. Since C. J. Thompsen's work, we have placed our divisions of the ages in a system based on tools alone - stone to bronze, bronze to iron - and it is increasingly recognized that this is not always supported by the cultural remains. Gibson (2007) believes that a more important transition lies between the Early and Later Neolithic as there are much greater changes overall in burial practices, settlement, forms of artefacts (pottery included) and cultural activity (eg. feasting); and there is increasingly strong evidence for cultural continuity in Britain from the Late Neolithic to the Bronze Age (Boast 2002; Burgess & Shennan 1976; Gibson 1982, 2007). As a consequence, this study is designed to focus only on this window of time, but it does so with awareness of the traditions that preceded and succeeded it.

Prehistoric pots and sherds were uncovered before the turn of the 19th century, mainly by antiquarians, but the individual traditions of the Neolithic and Bronze Age were not defined in their modern understanding until the works of Abercromby (1912), Piggott (1936; 1954) and Childe (1931, 1940). This began several decades of defining the separate groups, something which still goes on today. It was whilst digging in Peterborough that T. D. Kendrick noticed that there were two distinct styles of pottery coming from the ground. The more decorative ware he called Peterborough Ware, and the plainer, Grimston Ware, each after the site where they were first identified (Piggott 1931: 68). At Windmill Hill, Grimston

Ware consistently was found at a lower layer than Peterborough Ware, and in most cases, there was a sterile layer in between the two (Piggott 1931: 83). Piggott named the older Neolithic Class A and the younger, Neolithic Class B, but the original names were more commonly used. Not long after, another type of pottery was identified at Clacton (Essex) by Piggott (1936), which was roughly contemporary with Peterborough Ware, but extended to the Beaker period. Due to its stylistic characteristics, it was called Grooved Ware (Piggott 1936; Childe 1940; Gibson 1986: 7). Recently, Grimston Ware was renamed Carinated Bowl, and Peterborough Ware, Impressed Ware, so that the names reflect characteristics of the pottery itself, rather than simply indicating where it was first identified.

The Bronze Age wares have been known since Thurnam's work in 1871, when he divided 'drinking cups' from 'food vessels' and 'urns', and again, in the first half of the 20th century these definitions were further refined, particularly by Abercromby and Smith. In any case, it is the transition to metallurgy and what this means culturally that has dominated the literature of the Bronze Age. The first use of metals in Britain (in the form of copper) roughly coincides with Beakers and it is this that has created an imbalanced attention on these vessels, giving them a greater significance than perhaps is merited. The Beaker argument, then, is one that is ongoing and seems to overshadow the rest of the innovations in ceramic technology of the time, thus, the definitions of the Bronze Age wares and their contemporaneity remains a puzzle yet unsolved, as does their connection to earlier Neolithic ceramic traditions. This chapter, therefore, reviews the literature of the ceramics from both the Neolithic and Bronze Age and attempts to consider the traditions equally and as a continuum that spans several thousand years, rather than as individual periods. It is hoped that this should clarify the evidence and create a stronger foundation from which to view the ceramics of the Tyne-Forth region.

Impressed Ware

Excavation in 1910 in Peterborough produced the remains of a settlement in the form of postholes, pits, middens and hearths (Abbott 1910). These were associated with domestic material, pot-boilers, flint flakes, scrapers, debitage and Beaker ceramic sherds (Abbott 1910: 334-6). However, at the bottom of the deposit in pit 1, another form of pottery was found with herringbone motif, fingertip impressions and coarse, gritty fabric. This was compared to a similar pot found at Mortlake and both were simply placed into a 'neolithic' category

(Smith 1910: 341). Then in 1925, whilst digging in the same area, it was Kendrick who defined Peterborough Ware as an independent style, and later Piggott (1954), and subsequently, Isobel Smith (1956; 1974) described the Ebbsfleet, Mortlake and Fengate substyles (Figure 3.1). These three substyles form a chronological sequence of what is now called Impressed Ware that spans c. 3600-2900 cal BC (Gibson 2002a).

Piggott (1931: 72; 1954: 303) described Peterborough Ware fabric as soft, containing large, lithic inclusions, a “soapy” surface, thick walls and incomplete firing. The vessels were generally in bowl form, with a hemispherical base, a marked or carinated shoulder, hollow neck and bevelled rim. Although most pots were round-bottomed, some flat-based versions are known. Piggott (1931: 72; 1954: 303-308) also describes the decoration as “profuse”, a “confused richness” (Piggott 1931: 114) that covers every part of the vessel including the rim, neck, shoulder and upper part of the pot with motifs of: twisted, knotted and whipped cord, stamps, comb, birdbone impressions, shells, fingertip and nail impressions, stab & drag marks and stab marks. These are arranged in patterns of herringbone, zigzag, crescent shapes, rows and zones.

Ebbsfleet Ware represents the earliest form of Impressed Ware. Its characteristics include thin walls, simple rims, sparser decoration than later styles and the use of twisted and whipped cord, incisions, fingernail impressions, and rows of dots and stab marks (Piggott 1954: 308).

Mortlake is the style that was first discovered at Peterborough, but represents the ‘flowering’ of the Impressed Ware tradition. The vessels tend to be globular with a deep cavetto zone above a defined carination at the shoulder. The rim is thickened and bevelled, often creating a T-shaped profile, and the decoration is more elaborate with: twisted and whipped cord, maggot patterns, comb, and cardium shell impressions in patterns of herringbone, zigzag, horizontal lines and multiple arcs (Piggott 1954: 309).

Fengate Ware tends to deviate from the previous two substyles as it has a more moulded rim and collar that is often bevelled and defined above a narrow neck and defined shoulder. The body is vase-shaped with narrowing walls and a flat, pedestalled base. Although Smith (1910), Piggott (1931: 67) and Smith (1954) linked this style to later Food Vessels and urns due to their striking similarities in form and fabric, more recent radiocarbon dates have shown that a hiatus of several centuries existed between the two traditions, so it is improbable that they were connected (Manby 2004). Fengate vessels have ornament on and inside the rim and sometimes over the entire external surface in motifs of: cord impressions, fingernail and






fingertip impressions, birdbone, incision, stabmarks and grooving. The collar in particular is frequently ornamented in such a way as to accentuate it, often with rows of stabmarks immediately below.

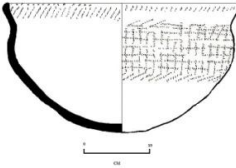
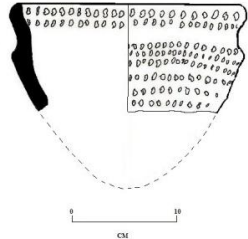
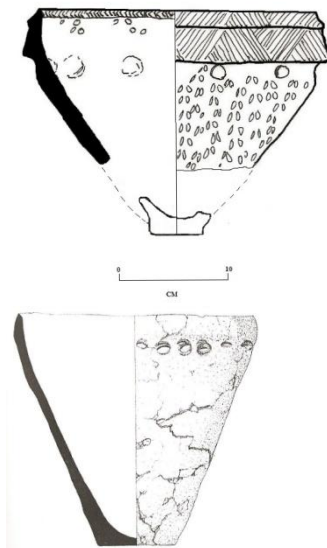
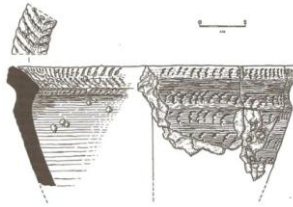
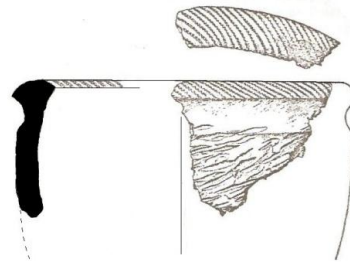
Impressed Ware is most often found on settlement sites, such as the Peterborough site where it was first uncovered, Lanton Quarry (Northumberland), Cheviot Quarry (Northumberland), Glenluce Sands (East Lothian), Hedderwick (East Lothian) and Meldon Bridge (Peeblesshire) are examples from the Tyne-Forth region. It is classically known from the ritual site of West Kennet long barrow, Wiltshire, where it was associated with the filling of the burial monument. At West Kennet, the behaviour of filling the side chambers with offerings of pottery begins with Impressed Ware and persists for a further 1000 years through the use of Beakers (Thomas & Whittle 1986). Absorbed residues taken from vessels in Wales have shown remains of beef and pork fat (Dudd et al. 1999), alluding to a diet that included domesticated animals, but faunal evidence at Impressed Ware sites, as at the Middle Neolithic sites on Rudston Wold, also includes wild resources such as red deer, pig, birds and fish (Harding 2006: 113). From the burial sites there is a partiality for fur-bearing animals, which were probably used for clothing or ornamentation of the body (Gibson & Bayliss 2010: 89). Associated artefacts are mainly of flint, including scrapers, serrated knives, transverse arrowheads and flakes, and it is probable that an assemblage of perishable artefacts existed within the cultural tradition as well (Gibson & Kinnes 1997: 67).

In the past 60 years, the descriptions of the substyles have been supported by subsequent finds, but other regional styles have been recognized as well (Gibson 1986: 19). The Rudston style in Yorkshire and the Meldon Bridge and Ford styles in the Scottish Borders and Northumberland (Figure 3.1) are examples that demonstrate the variability of Impressed Ware over its geographical expanse and centuries of use. It is also probable that the contemporaneity of the various substyles differed from region to region as they were brought to those places and either accepted or rejected.

Nationally, Impressed Ware is known to have developed after the final stages of the Carinated Bowl tradition at one end and overlapped slightly with Grooved Ware at the other. The latest radiocarbon determinations from the study area that use Bayesian statistics, however, place Impressed Ware before the earlier end of this sequence beginning c. 3800 cal BC and ending in the first quarter of the 3rd millennium cal BC (Passmore & Waddington

Figure 3.1: Impressed Ware substyles and their characteristics

	Ebbsfleet	Mortlake	Fengate	Meldon Bridge	Ford Style
Form	Rounded bottom; thin walls, finer fabric.	More angular walls, creating more V-shaped profile, rounded bottom	Heavy collar, tapering body and flat (often pedestalled) base creating a vase shape	Large vessels with open mouths, shallow, concave necks, carinations and rounded bodies (base unknown)	Rounded rim with deep cavetto, carination at shoulder and rounded, but splayed walls that suggest straightish profile and possibly flat base. Very coarse fabric.
Rim	Simple rims bent outwards to create slightly narrower neck 	Thicker and heavier, in some cases more angular, with a bevel, creating a T-shaped profile; with a straighter neck, creating a cavetto zone under the rim (sometimes very deep) 	Bevelled and defined, creating a collar on the vessel, often flat and diag on inside of rim 	Angular with external moulding and internal bevel 	Heavy, semi-circular with deep cavetto creating a T-shaped profile 
Decoratio n	More sparsely decorated. Motifs: twisted cord, whipped cord, incision, fingernail impressions, rows dots/stabmarks	Much more decoration with more motifs (although they are still fairly simple): twisted, whipped cord in herringbone, concentric semi-circles or encircling lines; bird bone, fingernail,	Highly decorated on external surface, on rim and inside rim with impressions of cord, fingernail, fingertip, birdbone, incision; collar decorated to define it from pot, often with rows stabmarks underneath.	On body, rim and inside rim in impressions of birdbone, twisted and whipped cord. Often rows repeated patterns in short, diagonal lines, zigzag or herringbone patterns	Lot impressed and incised decoration of twisted cord and short incisions in diagonal lines and semi-circles (on rim) in defined zones avoiding the cavetto. Decoration on body and rim.

		fingertip, reed, quill impressions			
Example drawing					
	Windmill Hill, Wiltshire (redrawn from Gibson & Woods 1997: 225)	West Kennet, Wiltshire (redrawn from Gibson & Woods 1997: 225)	West Kennet, Wiltshire (above) and Thirlings, Northumberland (below) (West Kennet pot redrawn from Gibson & Woods 1997: 225; Thirlings pot after Miket et al. 2008)	Meldon Bridge, Peeblesshire (after Speak & Burgess 1999: 63)	Ford, Northumberland (after Longworth 1969: 259)

2009; Millson et al. 2012). It is probable that the discrepancy of dates between the national standard and the local range is caused by more recent determinations of local dates that use narrower margins of error and more accurate calibration curves. This may also suggest that our sweeping traditions and substyles could be missing the regional trends that may have been present from the beginning of the Later Neolithic. Impressed Ware is probably the least understood of the ceramic traditions in Britain because its variability is too great to grasp in its entirety with the scanty evidence that is available. Indeed, its adoption as a domestic ware coincides with important changes in other aspects of lifestyle and ideology. It was in the Middle Neolithic that the communal monuments, such as causewayed enclosures and earthen long barrows, were discontinued and henges, stone circles and earthen round barrows began to be built – activities that developed and intensified through to the Bronze Age (Gibson & Woods 1997: 64).

Grooved Ware

Grooved Ware represents an anomaly in early prehistoric ceramic traditions, which makes it easy to identify amidst the other wares. Where Impressed Ware, Food Vessels and Collared Urns have thicker walls and coarse fabrics, Grooved Ware often has thinner, hard walls with smoother fabrics and surfaces. Where Beakers follow a sinuous form and have a comb-based decoration, Grooved Ware pots are straight or splay walled and have myriad motifs based on incision. It is the only ware that incorporates applied decoration that is more complex than the horizontal or curvilinear cordons of cinerary urns. And yet, it fits into the continuum as some motifs, such as incision, live on in local styles of Beaker, and wavy cordons and applied pellets are used on some Vase Urns to decorate their rims (traditionally called Encrusted Urns). Perhaps it is due to its origin in the far reaches of Britain that made Grooved Ware different than other types of pottery, but its similarities to the other wares also denote the cultural continuity across various groups, and over time, on these islands.

Whilst some of the first Impressed Ware was being made in Yorkshire and spreading out across Britain and Ireland, Grooved Ware was developed in Orkney (Figure 3.2) (Ashmore 1998; Cleal & MacSween 1999: 5; Manby 1999: 100; Schulting et al. 2010: 30). The radiocarbon dates determined for Skara Brae and Barnhouse place its origin at c. 3400-3100 cal BC, which although earlier by a century or two than the sites further south, is not much earlier than the sites on Machrie Moor or at Balfarg Riding School (both beginning c. 3100

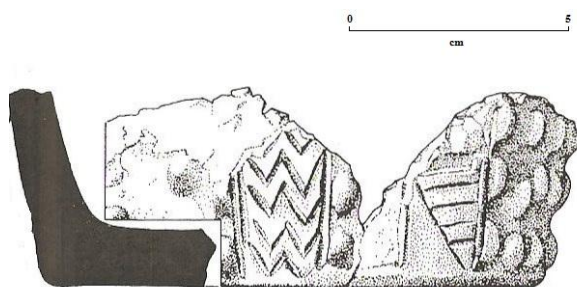


Figure 3.2: Grooved Ware from Skara Brae (from Clarke 1976: 12).

cal BC) (Ashmore 1998: 142-145). A more recent dating programme at Quanterness has placed the origin of Grooved Ware to c. 3100 cal BC, demonstrating that its spread south must have been rapid and it might have co-mingled with Impressed Ware for a few generations (Schulting et al. 2010). Recent dates from Northumberland and the Scottish

Borders place the Grooved Ware sequence in this region into a timeframe of 3150 – 2700 cal BC (Millson et al. 2012).

Grooved Ware was first defined by Warren et al. in 1936 when they noticed similarities in the pottery found at the Clacton site in Essex, Woodhenge (Wiltshire) and Skara Brae (Orkney). They called it Grooved Ware because of the predominant form of decoration (Piggott 1954: 321), but this was later changed to Rinyo Ware, and subsequently Rinyo-Clacton, tying the two main findspots together. In the 1950s, Isobel Smith reclassified Grooved Ware, based on new finds, and defined three styles of the pottery: Clacton, Woodlands, and Woodhenge (later to be called Durrington Walls) (Smith 1956: 190; 1974). To this was added the northern Rinyo style in a re-assessment by Wainwright & Longworth (1971) (Figure 3.3).

Figure 3.3: Grooved Ware Sub-styles (after Wainwright & Longworth 1974).

	Clacton Style	Woodlands Style	Durrington Walls Style	Rinyo Style
<i>Location of first discovery</i>	Clacton, Essex	Woodhenge, Dorset	Durrington Walls, Dorset	Southern Scotland and Orkney
<i>Types of Vessels</i>	Vertical/splay-sided pots; squat tub-shaped pots	Small open bowls, tub-shaped pots		
<i>Rim shape</i>	Simple, rounded	Simple, pointed or T-shaped	Simple, pointed; moulded bevel on top (vertical bevel)	Internal step bevel
<i>Rim decoration (internal)</i>	Horizontal grooves Complex plastic decoration	Incised herringbone Groups of strips applied across rim	Incised decoration under rim	Continuous scalloped rim
<i>External</i>	Grooved or incised	Plain horizontal or	Grooved spirals or	Applied pellets

decoration	triangles, lozenges, or rectangles filled with dots	converging cordons applied or pinched from surface	concentric circles	Applied roundels
	Multiple grooved or incised chevrons	Slashed horizontal or converging cordons applied or pinched from surface	Vertical cordons (plain or decorated) dividing body into panels	Applied complex geometric patterns
	Opposed grooved or incised chevrons	Ladder pattern	Vertical single or multiple incised lines or grooved filled triangles	Grooved cordons (diagonal)
	Staggered/evenly spaced oval impressions (also called maggots)	Applied or grooved 'knots' where cordons converge	Twisted cord	Cordons with round impressions (diagonal)

The *Clacton style* generally has medium-sized vessels of 100-260 mm in diameter, and has splayed, vertical sides with simple, rounded rims (Wainwright & Longworth 1971: 237). Decoration is in zones of incised and impressed motifs. There is generally much rustication, finger-pinching, dot-filled lozenges and triangles, and staggered ovals and chevrons across the surface. This style is recognized by a lack of whipped and twisted cord and applied decoration (Figure 3.4).

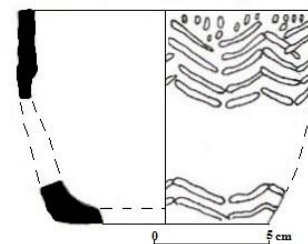


Figure 3.4: An example of Clacton substyle Grooved Ware from Corporation Farm, Upper Thames (from Barclay 1999, 11)

The *Woodlands style* has the smallest vessels, usually small open bowls and tub-shaped pots

(Figure 3.5). They tend to have very thin walls and T-shaped rims (although not as defined as Impressed Ware rims). Decoration includes grooved ladder, incised herringbone, perforated strips of clay or horizontal

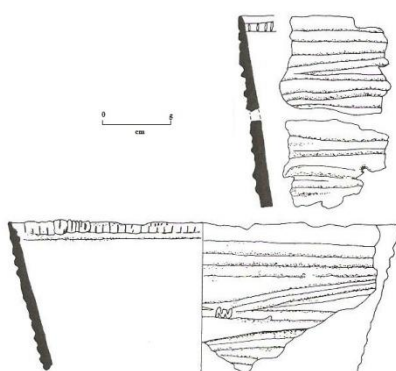


Figure 3.5: Two examples of Woodlands substyle Grooved Ware from the Upper Thames (Sutton Courtenay, above; Radley, below)(from Barclay 1999, 11)

perforated lugs. There are also many horizontal

cordons which are plain, or have been slashed and pinched (Wainwright & Longworth 1971: 238-240).

The *Durrington Walls* style produces large vessels with deep bucket shapes and simple and internally bevelled rims decorated with incised lines (Figure 3.6).

The outside of the pot is heavily decorated with panels of vertical cordons and filled with combed lines, finger-pinching, or impressions. Twisted cord is common

within these panels, as is grooved decoration. Very typical of Durrington Walls style is the use of heavy cordons which converge in vertical, horizontal and diagonal directions. Grooved spirals and circles are also common, as is rustication (Wainwright & Longworth 1971: 240-242).

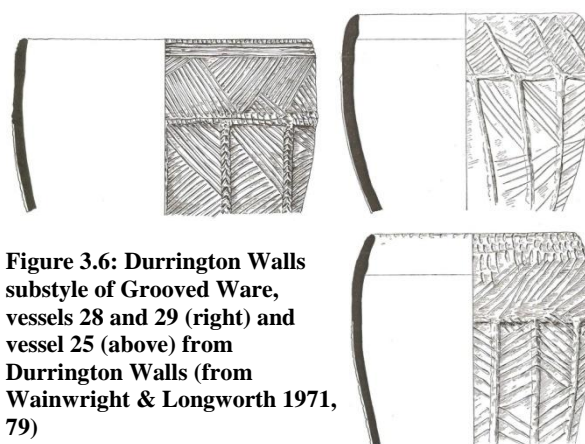


Figure 3.6: Durrington Walls substyle of Grooved Ware, vessels 28 and 29 (right) and vessel 25 (above) from Durrington Walls (from Wainwright & Longworth 1971, 79)

Rinyo style often yields the largest vessels. These are tub-shaped pots with internal step-bevels inside the rim (Figures 3.2 and 3.7). There is much use of plastic decoration (scalloped rims are typical) and applied clay pellets, roundels, concentric lozenges and other geometric shapes making the vessels distinctive. Some grooving and incising is also present (Wainwright & Longworth 1971: 242-243).



Figure 3.7: An example of Orcadian Grooved Ware from Quanterness (from Schulting et al. 2010: 31).

Even today, the problem remains, though, that too little Grooved Ware is known to understand its sequence and distribution across Britain and Ireland. Wainwright & Longworth (1971: 243) questioned if the *Rinyo style* should really be considered a substyle in its own right or if it represented the mixing of the three southern substyles with local Scottish pottery. Part of this problem was in the misconception that Grooved Ware began in the south of England and moved northwards, but it was also that at the time there were only two stratified

sites known in Scotland (at Skara Brae and Rinyo, both in Orkney) and no radiocarbon dates (Cowie & MacSween 1999: 48). It has only been in the last 40 years that the database we now rely upon was built and, although we know much more now, we are still only beginning to understand the Grooved Ware sequence.

Within the Orcadian setting, two phases have been determined that seem to separate the vessels' characteristics into comprehensive sub-styles that have nothing to do with Wainwright & Longworth's classification. The earliest phase had tall vessels with narrow bases and coarse, shell-tempered fabric and a decorative repertoire implementing applied motifs (Schulting 2010: 33). Radiocarbon dates from Knap of Howar on Papa Westray place these vessels within a range from 3620-3370 cal BC to 3320-2920 cal BC at 95% probability. In the second phase, the fabric is no longer tempered with shell and incised decoration is used in chevron, curved and straight line motifs (Schulting et al. 2010: 37). Examples from this incised phase are much more prevalent on the Orcadian sites and a range of dates place the second phase between 3020-2890 cal BC (95% probability). The style is "strikingly similar" to many vessels found on the mainland and Schulting et al. (2010: 37) point out examples from Balfarg Henge (Fife), and Knowth passage tomb in the Boyne Valley. Indeed, the illustrations are also very similar to sherds that were found at Yeavinger and Cheviot Quarry. However, it is still unclear if the two phases can be related to the material found elsewhere in Britain. At this point there are far too few radiocarbon dates and an understanding of how the style moved and integrated in various regions is beyond the scope of the data available.

It is known that Grooved Ware is most often found on domestic sites in contexts of postholes, pits, middens, hearths and stakeholes. The most famous of these are the southern sites where Grooved Ware was first discovered: Durrington Walls and Clacton, as well as Rinyo and Skara Brae, in Orkney, but many others have since been found. On Rudston Wold, in contrast to earlier Impressed Ware pits, the Grooved Ware was found only in association with domesticated animals (Rowley-Conwy & Owen 2011). Grooved Ware is also found at ritual sites, such as West Kennet long barrow in Wiltshire where sherds were uncovered near the entrance. These sherds were associated with bovine and porcine faunal remains, which suggests feasting activity that included the use of Grooved Ware (Thomas & Whittle 1986: 147). It is a common find at henges, not only at typical sites such as Woodhenge and Stonehenge, but across Britain and Ireland from Machrie Moor (Arran) to Thornborough (Yorkshire) to Knowth (in the Boyne Valley). It is not uncommon to see the same distinct motif at similar types of sites that are separated by vast geographical distances, something

which attests to a higher mobility of either ideas, objects or people than we have given Neolithic people credit for.

Rosamund Cleal (1999: 2) suggests that this may indicate that the people who used Grooved Ware shared a loosely defined set of common beliefs or symbols that manifested itself in the underlying ‘grammar’ of motifs in use. It has already been suggested that the real division in cultural continuity lies between the Early and Later Neolithic when communal, secondary burial makes way for more individual (or smaller groups of individuals) primary burials and cremations, and large communal monuments (such as causewayed enclosures) are often replaced by groups of smaller monuments (such as henges and stone circles). Indeed, Ashmore (1998: 139-140, 147) notes that there is a correlation with the inception of these monuments with the use of Grooved Ware pottery at approximately 3100-2400 cal BC. Although it is probable that the presence of a henge in two locations does not necessarily denote that they were thought about or even used in the same fashion, the fact that we find similar features with similar artefacts supports Piggott’s (1936) original hypothesis that some sort of cultural tradition and communication united people of the British Isles in the Later Neolithic, if only in a general way.

In a recent paper, Julian Thomas (2010) adopts this standpoint and links Grooved Ware to a concept of domesticity, which he suggests travelled from Orkney to the rest of the British Isles as a package of activities, objects, ideas and structures uniting an otherwise regional group of cultures. Following Bradley (1982, 2005), Thomas connects the art known from monuments in the Boyne Valley in Ireland to the Scottish carved stone balls and standing stones with Grooved Ware (Thomas 2010: 5), but taking this one step further, he suggests that the curvilinear motifs may have been used to symbolise the roundness of the house, and thus, the ‘domestic’, as a new social value. The decoration on Grooved Ware was, therefore, meant to symbolise the domestic activities for which pottery was used and, in the ritualised setting of the large monuments, it stood to reproduce the values and ideas attached to those symbols. “...the overall effect was to emphasize and dramatize the preparation and consumption of food. In other words, it rendered mundane activities more notable and socially visible” (Thomas 2010: 7).

Today, Smith’s substyles are still used to describe Grooved Ware finds for most of England, Wales and Ireland, but mixtures of the motifs are well-known at many sites. A study of Grooved Ware in Scotland by Ann Macsween (1995: 41) demonstrated no evidence of

regional groups based on the style and manufacture of the pots simply because there was more variation than continuity. This may tie in with Thomas' theory that the motifs acting as symbols, but it also indicates that if the motifs were symbols, they were not interpreted in the same way everywhere. Clearly, the Grooved Ware tradition was more fluid (Cleal 1999: 2). Thomas' argument is weakest in the links made between the Boyne Valley, Orkney and southern England because the activity seen in the archaeological record at these places tends to be the exception rather than the rule. Each area is highly monumentalised and stands out from the rest of the British and Irish material because of the unique and outstanding (non-domestic) monuments it possesses. Although they very well may have been linked symbolically during the Grooved Ware period and similar pottery is found in each of these locations, Grooved Ware is also found elsewhere. The significance of this needs to be explored to put its presence at sites such as Durrington Walls and Newgrange into perspective.

Beaker

Of all prehistoric ceramic styles, none have been analysed and written about more than Beakers. In fact, it could be argued that Beakers have been focused upon more than any other artefact type in the Neolithic or Bronze Age, which leads us to beg the question as to why a ceramic tradition with arguably fewer forms would be so important. Perhaps it is because its use was so widespread it encompassed most of Europe, and the seemingly standardized use and associations appear to indicate a single European culture. Or, it may be because it represents a transitional assemblage between two of our inferred ages, that of stone and bronze, and so we assume it holds the key to the most enigmatic attribute of culture: change. Indeed, it is for this reason that the period of Beaker introduction is currently debated as a separate period, albeit a short one (see Chapter 1 for discussion). Whatever the reason, Beakers remain alluring to the archaeologist wishing to know more about the nature of culture. It is for this reason that such a corpus of writing has been devoted to it that this section must be more detailed than those of the other ceramic wares.

Creating a setting: the Culture-Historical Period.

Since the majority of Beakers and Early Bronze Age ceramics are found in noticeable burial mounds, Beakers were amongst the first known prehistoric pottery found in Britain. Classed

as ‘drinking cups’ by Thurnam in 1871, they were thought to be contemporary to Bronze Age ‘Food Vessels’, ‘Incense Cups’ and ‘Cinerary Urns’. Based on what was available at the time, he divided the ‘drinking cups’ into three groups: high brimmed, globular cups (α); ovoid cups with out-turned rims (β); and low-rimmed cups (χ) (Thurnam 1871; Clarke 1970: 1).

By 1904, however, 300 ‘drinking cups’ had been gathered, and it was clear that the three types were not sufficient to classify them. So in 1912, John Abercromby published the first catalogue of British and Irish Bronze Age pottery with a discussion on ‘drinking cups’, or as he called them, ‘Beakers’. Abercromby redefined Thurnam’s three groups, exchanging the Greek characters for more user-friendly Roman letters (Clarke 1970: 1), and subdivided Group A into six subgroups; Group B into four; and Group C into five. Since the time of the Antiquarians, it had been held that the skeletal material from Britain demonstrated that two groups co-existed during the Neolithic-Bronze Age transition. The Neolithic people were said to have shorter, wider skulls (brachycephalic) than the dolichocephalic (longer, narrower headed) Bronze Age people (Figure 3.8). Abercromby followed this in his 1912 publication, where he explained the similarities in the archaeological findings in Europe with Britain. He believed that the skeletal variability seen in Britain, along with the first European-derived artefacts, arriving in a fully evolved form, supports an invasion of dolichocephalic people from the Rhine at the beginning of the Bronze Age (Abercromby 1912: 98-101). Although it is now known to be an extreme and highly criticized hypothesis, this belief continued to dominate Bronze Age discussions for almost another century and is still argued today (albeit with a lesser focus on full-scale invasion) (Clarke 1970; Brodie 1997; Case 1976, 1993, 2001; Needham 2005, 2007).

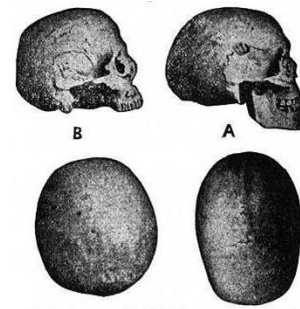


Figure 3.8: Examples of dolichocephalic (A) and brachycephalic (B) skull types (Thurnam 1871).

For the next three decades, Abercromby’s Beaker categories were discussed and further subdivided as new Beakers were uncovered (Clarke 1970: 1-2). J. G. D. Clark (1931) argued that groups A and C were much more similar than either were to B, whilst C. Mitchell (1934) contended that the real divide, at least for Scotland, lay between groups A and B and that both bore characteristics of C. In 1938, Stuart Piggott re-examined Abercromby’s reasons for separating groups B1 and B2, concluding that they must have had separate origins (Piggott

1938), and then in 1940, V. G. Childe defined for the first time, based on decoration rather than shape, a third B group (B3) (later known by Clarke as AOC). Perhaps the most lasting reworking of this period was the renaming of Abercromby's groups by Piggott in the 1940s with the more descriptive terms of: Bell Beaker, Barrel Beaker, Short-necked Beaker and Long-necked Beaker. By 1950, Abercromby's system of Beaker classification had been refined to such an extent that its initial purpose had been defeated – no standard approach could be taken to the material and any approach seemed to give no new information. “The conclusions reached seemed to some extent predetermined by the direction of the approach, as surely a person walking along a plank can come only to one end” (Clarke 1970: 3). In the wake of J. D. van der Waals and W. Glasbergen's work on Beakers in the Netherlands in 1955, which revealed startling similarities to the British material, the need for a complete re-evaluation of Beaker pottery in Britain and Ireland was particularly clear.

Enter Clarke: Using the New Archaeology.

Clarke (1970: 3-4) identified three important reasons to focus his doctoral research on the reclassification of Beakers in the British Isles. Firstly, it had been almost 80 years since Abercromby had compiled his evaluation of British pottery and since that time the number of Beakers in collection had ballooned from 300 to almost 2000 (Clarke 1970: 3). Moreover, Abercromby had only considered full pots and had based his analysis on shape alone. Clarke's second reason was to create a standard method of analysis that indicated the origins of styles and/or of the people making them. He took a multivariate approach, considering: decorative motifs, the placement thereof on the pot, fabric and manufacturing methods, and shape (although he argues that this is less indicative of culture since it is influenced by function) (Clarke 1970: 24-27). Finally, following the Processual approach that was developing at the time, he criticized previous research for focusing too much on the classification system and not considering the people who made the pots. The classification systems in use, he argued, had become as entities of their own rather than tools to reflect the people who created the archaeology in the first place (Clarke 1970: 3).

From his analysis of 95% of the Beakers known at the time, Clarke noted 38 motif elements fitting into five chronologically progressive groups, where Group 1 comprised a basic European set from which all the other groups evolved (Clarke 1970: 16-17). The placement of these motifs could further be grouped into a set of seven styles that evolved one to the next

over time: Oi, a, b, c, d, e, Oii. Each of these, with the exception of Oi and Oii, both of which are all-over decorative styles, was based on patterns of decorated and undecorated panels (Clarke 1970: 11-15). Most importantly for his classification, however, was Clarke’s labelling system, which abandoned previous use of numbers and letters and instead reflected where the pot was found and where its style was thought to have originated (Clarke 1970: 37-40). Eight Beaker groups were proposed as having been produced by initial migrating groups and their offspring: AOC, E, W/MR, N/MR, N/NR, BW, E. Ang., and N1/D (Figure 3.9), and after several generations, Clarke (1970: 36, 40-43) believed two regional types, or provinces, developed, north and south, in which styles of N2-4 and S1-4 were made (Figure 3.10). In addition, Clarke (1970: 43) considered domestic Beaker pottery and determined three types of decoration, similar to that found in the Netherlands and Rhineland: fingernail impression, finger-pinching and rustication.

Figure 3.9: Beaker Classification Systems 1871-1970 (Clarke 1970: 43).

Basic Thurnam/ Abercromby	Abercromby et al.	Piggott	Clarke
B	B1	Bell	E; W/MR; N/MR; E. Ang;
	B2	Barrel	BW; W/MR; E; N/MR; N/NR
	B3	Cord Zoned	AOC
	B/C		N1; N2; N/NR; BW
C	C	Short neck	N1; N2; N3; N4
	A/B		S1; S2; S3
	A/C		S1; S2; S3
A	A	Long neck	S1; S2; S3; S4

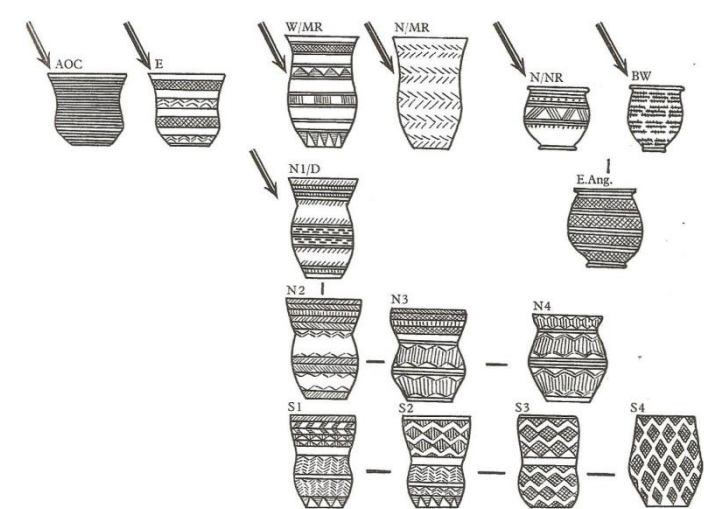


Figure 3.10: Clarke’s Beaker sub-styles and their development over space and time (from Clarke 1970: 36).

Although Clarke's work tends to fall back into the invasion hypothesis of previous works, despite his attempt to abandon them, his corpus is novel in that it demonstrates the complexity of the Beaker record. He notes that Beaker systems are "polythetic" and complex (Clarke 1970: 254) and that, although Piggott's four basic shapes are correct, there is much more variation across both space and time. No doubt it is this realisation that urged Clarke (1976: 472) to encourage more regional work not long after his corpus was published.

Despite its enormous contribution to British Beaker studies, Clarke's work almost immediately came under harsh criticism. In 1972, J. N. Lanting and J. D. van der Waals published a comment on Clarke's books for *Helinium*. They argued that Clarke's de-emphasis of shape, just as his predecessors' neglect of decoration, caused confusion in his origins and chronology and this, in turn, affected his conclusions (Lanting & van der Waals 1972: 21-24). Clarke's focus, they felt, was so fixated on the origins of British Beakers set in Europe that he overlooked insular developments and was only able to see one main divide in the British material – that of north and south – when the material suggests more (Lanting & van der Waals 1972: 27). Lanting & van der Waals (1972: 27) also attacked Clarke, stating he was presumptuous in his conclusions:

When reading the detailed descriptions of these groups, one easily forgets that it is hypothetical groups that are being described, resulting from tentative classification; so much do the descriptions have the character of an objective registration of groups of unquestionable reality.

They argued that the data from Britain is too complicated to see it simply as a series of influences from Europe and then presented their own analysis of the British material.

Lanting & van der Waals (1972: 36) divided the Beakers from Britain into a series of seven chronological stages, or steps, that were based on the evolving uses of shape, decoration, placement of decoration, and associated artefacts (Figures 3.11 and 3.12). They noted four regions: Wessex, East Anglia/Kent, Yorkshire and northeast England/southeast Scotland (Lanting & van der Waals 1972: 38-41); however, it is only in Wessex that all seven steps were found. They concluded that, contrary to Clarke's series of invasions, a matrix of interaction was demonstrated where things changed differentially according to the groups interacting (Lanting & van der Waals 1972: 44). Only Wessex remained in contact with Europe during the entire Beaker period, and in the other three regions, Beakers went in and out of use during this time.

Figure 3.11: Lanting & van der Waals' (1972) Classification of Beakers in Britain.

Step	Characteristics	Dates
1	AOC, Maritime Beakers	2100-1900 BC
2	1 st regional development; low belly carination; simple zones; cross-hatching, multiple horiz comb lines	1950-1850 BC
3	More slender and more motifs; some with belly carination but higher up on vessel; can include zoned AOC or AOComb	1900-1800 BC
4	Rare; neck emphasis in bend or décor; usually horiz lines (in groove in one case)	1850-1750 BC
5	Even more obvious neck with sharp bend, longer; first vert bridging zones (often with metopes), more motifs, contrasting popular.	1800-1650 BC
6	Neck less emphasized, more cylindrical; belly lower and more globular; contraction or fusion zones – 2-3 broad bands (Clarke's styles d, e)	1700-1550 BC
7	Neck and body 'fuse'; complete fusion zones (a, d)	1600-1500 BC

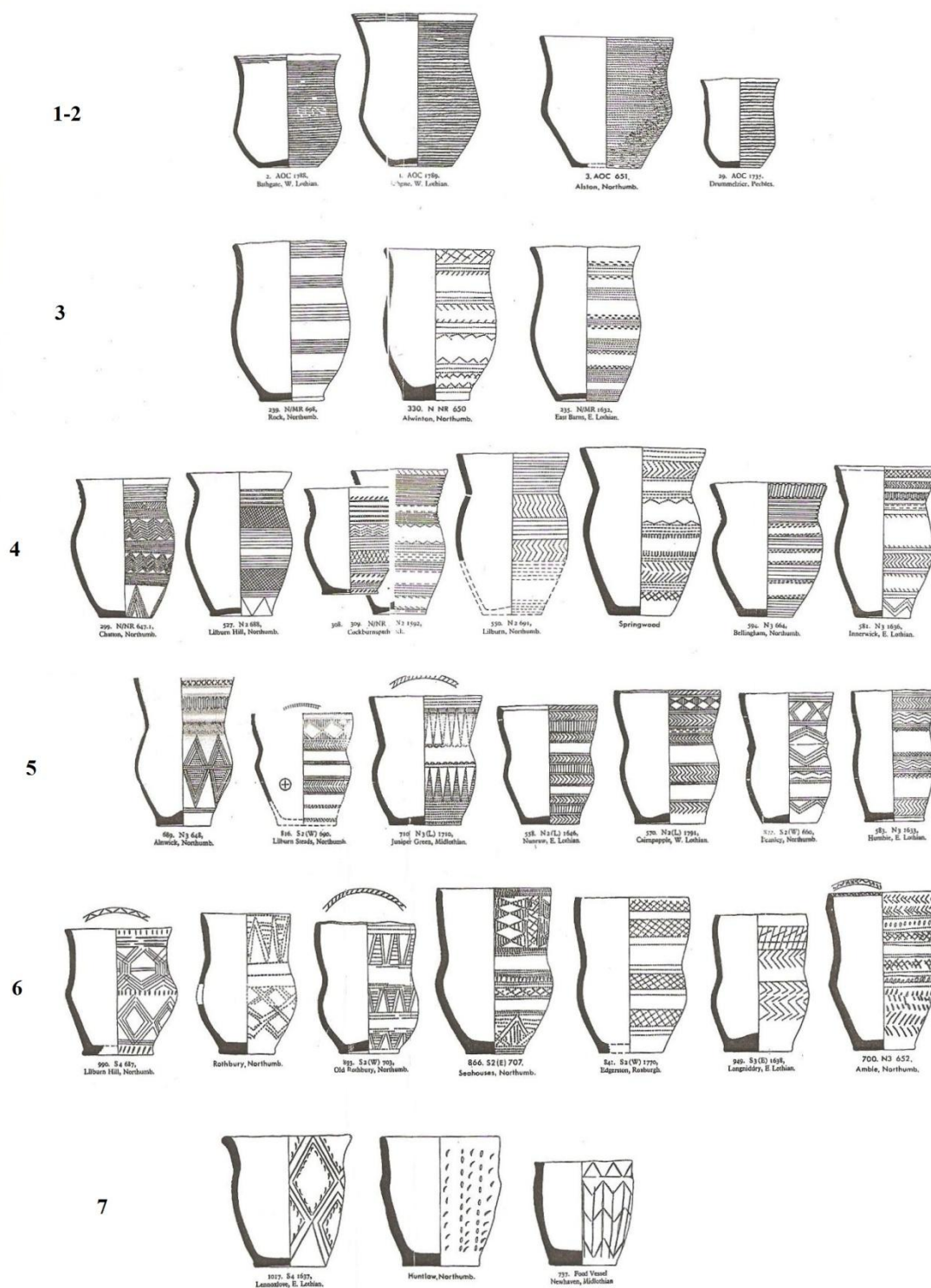


Figure 3:12: Lanting and van der Waals' (1972) Beaker substyles and their development.

The Points of View start shifting

In the later 1970s and into the 1980s, philosophy in archaeology met with an upheaval perhaps greater than it has ever known. Backlash against the New Archaeologists, or Processualists, and their focus on objectivity and science made way for the Post-processualists and their post-modern ideas largely adapted from the arts and social sciences (Trigger 2008). Perhaps overdue, the use of ethnography, sociological philosophy, psychology and feminism entered archaeological thought and took a more prominent role. This is not to say that the Processualists never considered these concepts, but simply that they had been focusing on other aspects of archaeology and so it is with this that the points of view shifted.

Beaker studies became one of the main foci of this debate. The very questions themselves on which Abercromby, Piggott, Childe, Clarke and Lanting & van der Waals had spent so much time: how “Beaker people” moved into Britain and how local natives were colonized by the “Beaker people”, came under fire. Pots had too long been equated to actual people, it was argued, and this is why no new information could be gleaned from the Beaker data (Burgess & Shennan 1976; Case 1976; Clarke 1976; Gibson 1982). It is true that the introduction of Beakers represented new types of artefacts and behaviour (mostly funerary) spreading across a vast territory and into Britain, but the evidence for a new culture of dolichocephalic people invading was tenuous. There was no indication of violence on the Neolithic sites and there was more evidence for regionalisation and the continuation of culture (Burgess & Shennan 1976: 309-310). If a “Beaker people” had invaded, then as an autonomous culture they would bring with them a clear social and economic system and yet, “...there are no signs of a common social or economic system, no uniform settlement or house types, no common ritual monuments or burial traditions” (Burgess & Shennan 1976: 309). Clearly, the appearance of Beakers and the specific funerary ‘package’ that came along with them must have represented the spread of ideas rather than people.

Utilising concepts from the other social sciences, particularly anthropology, it was suggested that perhaps the pots represented a fashion that had spread through trade networks, or even the movement of specialists who settled and made the pots locally (Bailloud 1974). Burgess & Shennan (1976) proposed that the ‘Beaker package’ may have moved as a set of ideas, as with the peyote cult in North America, whilst Case (1976) argued for trade and Beakers representing a prestige good for elite members of society, not unlike the Kula ring of the

South Pacific that was described by Malinowski in 1922. It was also argued that Beakers may have been part of an assemblage for a ‘male drinking cult’, such as those known in the later Hallstatt period in Central Europe (Cunliffe 1997). Despite his original stance on invasion, Clarke (1976: 461) suggested that within the complexity of the European Beakers as a whole, probably all ideas: invasion, diffusion, migration and local evolution, were correct and a more open-minded theory was what would allow us to grasp this. Although this is a seemingly ‘safe’ stance, Clarke’s words were probably more prophetic than he even realized as more recent studies have demonstrated that many Beakers were made locally in Britain, whilst others were brought from other places (Salanova 2001: 95; Mullen, pers. comm.). Clearly, the reality of Beaker introduction was more nuanced than was suggested at this time. Some people moved over long distances, such as the Amesbury Archer, who was born and raised in central Europe, or possibly as far as Eastern Europe, before coming to Wiltshire (Evans et al. 2006, 311; Evans et al. 2012: 9); or the woman who was found in Cirencester, Gloucestershire, who was buried with a locally-made Beaker, but whose oxygen isotopes matched southwestern England (Mullen, pers. comm.). Others were born in the same place they in which they lived and died. Evans et al.’s (2006) study of the oxygen isotopes found in the teeth of individuals at Boscombe Down, Normanton Down and Stonehenge demonstrates just this. Whilst the men buried at Normanton Down and Stonehenge were found to have been born and raised at Stonehenge, the three men buried at Boscombe Down had signatures that told of long distance travel during their lives that began in Wales, or possibly even Scotland, and adolescent years in central England. Since all were buried in the Stonehenge landscape, they must have travelled there sometime in their adulthoods when their teeth had finished growing. In contrast to this are the two children who were buried with the men and who had been born locally (Evans et al. 2006: 316). It is of interest that all three of the adult males at Boscombe Down showed a similar life pattern of leaving the place of their birth between the ages of 6 and 9 to go elsewhere for their teenage years and then onto Stonehenge sometime in adulthood. Evans et al. (2006: 315-6) remark that this may reveal a cultural practice for some individuals at this time to send their sons elsewhere in their later childhood. These examples demonstrate that life was much more complex than we have given the Early Bronze Age people credit for and a single interpretation cannot capture this. It is this variation that the Beaker People Project is currently trying to unravel using isotopic analysis.

The Patchwork Quilt of Arguments: 1990-present

The last 20 years of Beaker studies have seen more consistent opposing argument than before. Whereas the focus of the Post-processualist period was on the nature of an ideological shift from Neolithic to Bronze Age lifestyle, since 2000, the invasion and migration theories have been reclaimed (Needham 2005; 2007; 2012; van der Linden 2007a). A better understanding of absolute dates and the use of absolute methods, such as isotopic analysis, residue analysis, use-wear analysis and petrology to obtain more detailed evidence has fuelled the debate, and it has become more complex than before.

Beakers represent the first type of pottery to be used on an international scale, particularly across significant passes of water, since the Carinated Bowl tradition of the Early Neolithic. The sheer expanse of their use and consistency of the associated artefacts found in similar contexts (flexed inhumation burials) is startling, and so some specialists returned to the idea that it must represent a common belief system that could only have spread through the movement of people. Needham (2005: 209; 2007: 42) believes the archaeological evidence points to two phases of initial movement of people and the regionalisation of their ideas. He suggests that groups of people carrying the “Beaker culture” migrated across Europe and met with local Neolithic groups. Where they were able to settle, they did so, and where they could not, they moved on, creating the “...patchiness of the distribution of consolidated Beaker culture” (Needham 2007: 42). Once settled, the immigrant group would have had to assert its culture in order to maintain it and so the standard AOC and early Bell Beaker remains tend to be similar across Europe. However, after several generations, the, “Beaker cultural values, both material and conceptual, insidiously overcome pre-existing values and become the prevailing cultural ethos” (Needham 2005: 209). Local intermarriage allowed for some of the Late Neolithic ceramic styles to influence later Beakers and so regional styles developed (2005: 209; 2007: 42).

Needham (2007: 41), in particular, questions how many people initially moved, and why. He proposes that, in some cases, groups may have gone forth in search of more copper sources (Needham 2007: 42). Indeed, at Ross Island, Killarney, Ireland, a settlement was found in direct association with copper mines (O’Brien 2004). Contexts of postholes, stakeholes, pits, trenches and deposits of animal bones, AOC and other early beaker sherds and flint were found in arrangements of at least 11 structures (O’Brien 2004: 170-183). Alongside the settlement were two open mines with Bronze Age stone hammers (1042 fragments of these

were found in one area alone) (O'Brien 2004: 183), and a processing area with pit furnaces, copper ingots and ore was discovered (O'Brien 2004: 190). Associated radiocarbon dates ranging from 2400-1900 BC place the settlement and mines in chronological association and both were concluded to have been used intermittently through this time (O'Brien 2004: 302). However, Needham (2007: 42) stresses that not all places to where Beakers spread had copper resources and so this may have simply been part of their initial reasons for moving, which leaves the discussion open.

Several others have proposed that the idea of Beakers may have spread by much smaller migrations. Case (1976) originally argued that the first Beakers may have arrived in Britain through trade. Either their form, associated ideology or contents attracted locals or the regional styles developed through a "...compromise between identity and emulation" (Case 1995: 55). However, petrology has increasingly shown that very few pots were actually traded and the majority were made from local raw materials (Salanova 2001: 95-6). Brodie (1997, 2001), Salanova (2001) and vander Linden (2007a) have all suggested that the spread of Beakers seems more akin to a fashion, but one which moved as knowledge with individuals. They believe that trade or migration may be enough to account for the distance the tradition moves, but it does not sufficiently explain how widespread it became (van der Linden 2007a: 343). Stable isotope analysis has shown small-scale movements of some individuals or small groups at the beginning of Beaker use (van der Linden 2007a: 343-4), and since potting is thought to have been a female craft, they propose that it was women, as marriage partners, who were traded across groups and brought with them the 'know-how' to make Beakers (Brodie 1997, 2001; Salanova 2001; van der Linden 2007a).

Each of these explanations: migration, trade and marriage, are supported by substantial evidence, but it is argued convincingly as well that they are not sufficient to explain the spread of Beakers and related paraphernalia everywhere. For example, Ross Island was inhabited for its copper, but northern England also saw an influx of Beakers and does not have a copper resource; Wessex was popular for trade through the beginning and end of Beaker use, probably through the waterways that lead there, but the Paris Basin, which also has good water routes, produces much less evidence for Beaker manufacture and use. Indeed, the evidence seems to refer back to Clarke's (1976: 461) statement that, "A universal, Pan European, single factor explanation is improbable to be a realistic hypothesis to account for the variability in local densities, settlement and domestic contexts, association and distribution patterns and varied time depths."

When considering the material in Britain on a more regional scale, Gibson (2007) asserts that there is more continuity than abrupt change with the arrival of Beakers. In his evaluation of burial, the most common context for Beaker finds, he states our view of the “pan-European” picture has created circular arguments (Gibson 2007: 47). In Beaker burials we expect to see a single, flexed inhumation in a stone cist with a pot and assemblage of standard artefacts: barbed & tanged arrowheads, flint knives, scrapers, copper awls, etc..., all covered by a mound. This expectation, however, has led us to conclude any burial with one or more of the expected elements is Beaker whether there is a pot or even a radiocarbon date (Gibson 2007: 49). Gibson assesses all of the “Beaker elements” and proves that each of these can be found before the onset of the Bronze Age. In fact, he believes the evidence holds that the true transition lies between the Early and Late Neolithic with simply an increase in complexity into the Bronze Age (Gibson 2007: 47). This is something that Heyd (2012) asserts for the evidence found on mainland Europe as well, where the development and spread of Beakers appears to be the climax of a longer process of cultural interaction over very long distances. Therefore, the important changes that the Beakers represent are probably much more complex and, perhaps, less reliant on the pottery itself. “It is my opinion that the ‘Beaker burial’, with its all-too-familiar pottery and artefact package, might therefore be regarded as a veneer which catches the eye and draws attention away from the chipboard beneath” (Gibson 2007: 49).

This view of continuity and local development is shared by Boast (1995, 2002) who argues that the reason we cannot fully understand what is happening during the time of Beakers is not due to a lack of evidence or problems with the material, but with our point of view. We place too much of our own meaning on the pots, making them seem much more important than the Bronze Age people may have thought they were. Boast points out, for example, that we focus on trade between northern England and the Netherlands and between southern England and Brittany and emphasize the differences between the north and the south, but fail to recognize that this should be obvious (Boast 1995: 75; 2002: 104). Northern England is approximately 250 miles from the Netherlands and southern England is much closer to Brittany, but the north and south of England are 400 miles apart. Boast believes that Beakers do not share some underlying grammar, related to a “Beaker prototype” that potters were trying to achieve. They are not of a single tradition as Case argues. Their characteristics are too variable for this to be the case. Instead, Boast thinks that the evidence from the pots

demonstrate a general set of principles that individual groups held in common over vast stretches of space and time, creating a “bricolage” of similar elements (Boast 2002: 104).

Conclusion?: It ends in a cliff-hanger

So where does this leave us in the understanding of Beakers and what they represent of the past? It seems that the problem with the four main explanations of: migration, trade, marriage and changing fashion is that they all are used in the attempt to make something that is complex, easy. Amidst all the latest data, Clarke’s (1976) assertion, stated at the beginning of the modern arguments, that the Late Neolithic-Bronze Age transition was too complicated to have only one explanation seems truer than ever. It is probable that over the 800 years during which Beakers were made all of the above occurred in different places at different times, but not in a uniform way. This is seen by the fact that none of the hypotheses can hold up on their own no matter how many times they are argued.

Moreover, the Beaker ceramic data is too often pulled out of its greater context, creating Gibson’s ‘distracting veneer’. The movement of people and objects within trade networks in the Beaker period is impressive, but only so if there was no mobility before (Scarre, pers. comm.). We know that obsidian, jadeite axes, amber, pottery and lithic tools moved just as far during the Neolithic (van der Linden 2007a: 347) and the widespread use of Carinated Bowl pottery attests to the long-distance migration of people as early as the Early Neolithic. At Duggleby Howe (Yorkshire), a Middle Neolithic burial monument, all of the inhumed individuals within were found to have originated from beyond the Yorkshire wolds (Montgomery et al. 2007). A recent study of the mitochondrial DNA of over 500 individuals in northwest Europe, from the Mesolithic onwards, supports a very long prehistory of long-distance travel of people from the Mesolithic/Neolithic transition onwards (Ricaud et al. 2012). An influx of new people from the east of Europe was visible at the beginning of the Neolithic, which is associated with the adoption of domesticates in the archaeological record. After this, no new haplogroups can be discerned from the data, but fluctuations within the existing groups show that people were moving around in increasing frequency across the entire western portion of the continent until the Bronze Age (Ricaud 2012: 17-18). So the presence of long-distance ties in the time of Beakers should not come as a surprise. If we consider that these networks simply became more complex over time from the Early Neolithic (or even earlier than that), linking more cultures and extending the possible range

of ideas, objects, technology, and places for people to move, the mobility and spread of Beakers and associated artefacts is not so extraordinary – it is part of a vast continuum (Heyd 2012).

In addition, the lack of radiocarbon dates and clear understanding of their chronology until recently has hindered our comprehension of Beakers (Kinnes et al. 1991; Sheridan 2007). In a study by Johannes Müller and Samuel van Willigen, all of the known radiocarbon dates from Western Europe and Britain were reconsidered to determine the origin and movement of the ceramic tradition (Müller & van Willigen 2001). Only those dates that were directly associated with Beakers and were taken from reliable sources (eg. human bone, instead of charcoal) were considered. The results showed that Beakers began in Iberia and spread out across Europe over the course of several hundred years (Müller & van Willigen 2001: 75). When looking at a period in retrospect, it is easy to think lightly of a century or two, but in real time, much can happen in four generations. Simply considering the historic centuries we know about in greater detail, one could argue that the details of life were vastly different century to century, although the overall cultural generalisations remained. What we see for the entire Beaker period may simply be an overall, general European Chalcolithic that left traces of single inhumations with a pot and hunting gear, but does not show unique individual cultures and their variability over time. Our microscope may simply be unable to see closer at this point, rendering our point of view too broad.

The greatest issue with the current debates, however, is the recurring theme that when Beakers spread across Europe, there were two separate cultures that came into contact (not unlike the events during the colonising of the New World). This has been greatly influenced by the persisting belief in pots = people. Each thinker, since the Processualist period, has accused the last of equating pots to people rather than seeing them for what they are: objects. And yet, each of these archaeologists then goes on to speak of the pots as direct representations of past humans (see for example, Clarke 1970; Lanting & van der Waals 1972: 27; Burgess & Shennan 1976: 309; Case 1976: 453, 1995; Gibson 1982; Boast 1995, 2007; Gibson 2007; van der Linden 2007a). Even in the Post-processual period, when Beakers were thought to represent only an ideology rather than a people, the spread of these ideas and practices were termed “Beaker culture”, which is really not far off “Beaker people”. Still today, discussion and use of the terms, “Beaker people” or “Beaker culture”, continues. It may not seem that this is much more than a problem of terminology, and an annoyance when reading the literature, but it is the ways in which we view the past that will have the

greatest impact on the conclusions to which we come. It seems that the greatest problem in Beaker studies today is the impact of Beaker studies before. It is our enduring desire to make something that is very complex, both spatially and temporally, easier to understand. And it is the influence of previous ideas about culture, and indeed, human nature, that we cannot seem to overcome:

The beaker problem is like other problems in archaeology. It appears to be merely a matter of fact, simply requiring more data, a finer classification and a more detailed chronology for its ultimate solution. This promised solution for the beaker ‘problem’ has been imminent for almost half a century [a century now in 2011] and yet recedes from our grasp. In reality, the problem is not a matter of data but a matter of alternative assumptions and approaches, alternative models and concepts, alternative questions and explanations – in short, a matter of theory (Clarke 1976: 460).

The language that Needham uses is the most extreme and creates an image of Beaker oppressors who take over Late Neolithic groups because they bring with them superior tools and ideology (Needham 2005; 2007; 2012):

In the writer’s view this is what led to the collapse of Grooved Ware culture around the 22nd century BC and the simultaneous flowering of Beaker culture. It may also have led to the formulation of a new set of ideals and cultural goods (among them Food Vessels) by the rump of indigenous society which may have felt itself to have been marginalised or relegated in social terms (Needham 2007: 44).

In less severe views, the Late Neolithic ‘natives’ acted as passive recipients who they could not help but adopt Beaker ways because they were innately superior. Indeed, not all Beaker specialists agree with this and Gibson (1982; 2007), Clarke (1976), Boast (1995; 2005) and van der Linden (2007a) have all spoken out against it. In particular, van der Linden (2007b: 182) discusses “plural equalities” where people would have chosen to interact because they felt the ‘other’ was equal enough to do so. Van der Linden’s views are in line with many studies done on cultural contact in the historic period and follow the idea that the result of cultural contact is usually the hybridisation of those cultures, even in situations that are oppressive (see Boaz 1924; Kroeber 1948; Bashkov 2004). People would only have chosen to adopt those things or ideas that they came into contact with if they could fit into their existing worldview; anything else would have been ignored. Van der Linden (2007b) stresses that it is the hierarchical view that has been applied to the past that has caused the confusion we see in the Early Bronze Age. The evidence shows that the Late Neolithic-Bronze Age transition was not a situation of ‘us’ versus ‘them’ or the entrance of a superior culture. It was equal groups living across a continent who had traded with one another, intermarried, immigrated and

emigrated for as long as anyone could remember. In this scenario, the concept of pots = people, or culture, is not tenable because the pots are just one element used by different people involved in a long-term, constantly evolving cultural network that informs their worldview. In this interpretation, it is just as probable that people from Britain might have learned about Beakers when they travelled to the Continent, rather than simply waiting for the new technology to come to them (Fokkens 2012: 123). On the surface, all of these groups appear similar because of their long-standing connection to one another, but it is in the finer detail that what we see as ‘regional variation’, that denotes what each stood for.

Food Vessels

Beneath what Gibson (Gibson & Woods 1997: 69; Gibson 2007) refers to as the “Beaker veneer”, we emerge from the Beaker argument in the Early Bronze Age with forms of pottery that are found in the same contexts as Beakers, but are of a very different form. Since the beginning of Bronze Age studies, the stylistic connection between Impressed Ware and Food Vessels has been repeatedly observed (Smith 1910; Abercromby 1912; Piggott 1931, 1956; Childe 1940; Smith 1954; ApSimon 1958; Cowie 1978; Gibson 1986; Gibson & Woods 1997). “Certain food-vessels might almost be taken for Neolithic bowls if they had a rounded base, and there appear to be intermediate links connecting these two forms” (Smith 1910: 347). Due to a lack of clear understanding of the differences between the two traditions, there are several examples in the literature of Food Vessels and Impressed Ware pots that were mixed up for these very reasons (Greenwell & Rolleston 1877; Abercromby 1912; Piggott 1931; Childe 1936). Indeed, it is the Food Vessel tradition that has been poorly defined until recently.

Food Vessels are characterized by their fabric, which is coarser and grittier than Grooved Ware or Beakers in the study area; the fabrics are often highly friable and usually covered by thick slip. All Food Vessels are classified as 100-200 mm tall, which separates them from Enlarged Food Vessels (now called Vase Urns and seen as a separate class within the same tradition) (Gibson 1986: 35), and the pots are made in two forms: vases and bowls. The simplest form is bipartite with narrowing walls (often forming a vase shape) and a moulded rim that has a pronounced shoulder and cavetto zone in between (Cowie 1978: 14; Gibson 1986: 35). In the north, decoration is found covering the pot (although some are undecorated on their lower third), whilst in the south, Food Vessels are much less ornamented, focusing

mainly on the collar (something which may anticipate Collared Urns). Cowie (1978: 24) describes the most common techniques of decoration in five categories: 1) applied relief: cordons, chevrons, knobs, bosses, bars and stops (vertical applied or pinched cordons placed at intervals in bevelled areas); 2) incision: cuneiform shapes, lines, slashes, nicks; 3) twisted, plaited, and whipped cord in horizontal and vertical rows, arcs and ‘maggots’; 4) stamps of animal/bird bone, stick, fingertip and fingernail; and 5) grooves (a form of incision that has a flat bottom surface). Food Vessel bowls tend to be more hemispherical in body shape, with flattened bottoms, but retain the bevelled, moulded rims and styles of decoration.

Abercromby (1912) originally developed a classification system for Food Vessels that included Yorkshire vases and Southern bipartite vases. As the types of pottery already discussed, his initial hypothesis for the origin and classification of the ware was debated over the proceeding decades as new specimens were found. Fox (1927) took a regional approach and wrote that Food Vessels developed in eastern Britain from the Neolithic wares and moved westward to Ireland as they evolved into Enlarged forms and Encrusted forms and then into Cinerary Urns. Childe (1936, 1940) believed that Food Vessels were the source of two evolutionary lines, where the smaller (bowls) with overhanging rims evolved into Collared Urns in the south and the larger (vases) became Encrusted Urns in the north. ApSimon (1958: 24) summarised the research from the first half of the 20th century, describing four categories: Yorkshire vases, southern English vases, Irish vases and Irish bowls. And Simpson (1968) refined this for northern Britain and Ireland by using the classifications of: Irish vases, Irish bowls and Yorkshire vases to discuss trends in funerary associations. The problem with these efforts was that all attempted to explain a highly regionalised tradition at a national level and none was able to date the vessels absolutely to consider changes in form, style or use over space and time. Even today, there are only 15 reliable dates for Scotland (Sheridan 2004). In Ireland, Brindley’s radiocarbon dating programme has resulted in an understanding that Food Vessel styles were largely contemporary, which reveals that burial was a variable practice. Sheridan’s (2004) analysis of the Scottish material appears to support this, although there are still painfully few dates.

Food Vessel Vases

The following categorisation scheme was summarised by Gibson & Woods (1999) and

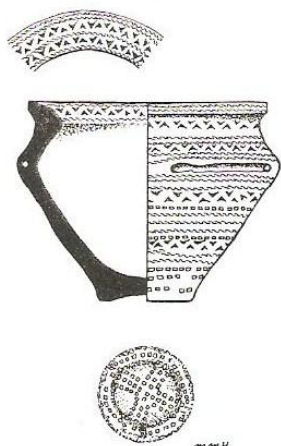


Figure 3.13: Yorkshire Vase from Newton, Northumberland (from Gates 1981)

Gibson (2002) and it is this set of Food Vessel ‘types’ that were used to catalogue the pottery examined in this research. More recent work by Gibson (1986: 35-6; Gibson & Woods 1999; Gibson 2002) builds on the work of ApSimon and Cowie, but provides a more up-to-date scheme, particularly for northern England and southern Scotland. Gibson divides the Food Vessel tradition into two types of vessels: vases and bowls, and attempts to account for regional diversity. Food Vessel vases are described in four types: Yorkshire vases, southern Bipartite vases, Ridged vases (Irish vases in ApSimon’s sense) and Bucket-shaped vases.

These are loosely based on previous categories, but attempt to account for regional variation. Yorkshire vases are characterized by a shoulder groove and 2-3 cavettos with stop ridges (Figure 3.13) (Cowie 1978: 14; Gibson 1986: 35). These tend to be found in the northern part of England and in southern Scotland. They are thought to have originated on England’s northeast coast and spread widely from there.

Southern bipartite vases are found in the south of England, below the Severn-Wash line and, although are similar in shape to Yorkshire vases, are more angular in profile (Gibson 1986: 35). A variant of these are the horseshoe handled Biconical urns, described by ApSimon (1972). They have less pronounced shoulders and are more sparsely decorated. In the rest of the country, bipartite Food Vessel vases are commonly found, as are tripartite Food Vessels (Figures 3.14 and 3.15).

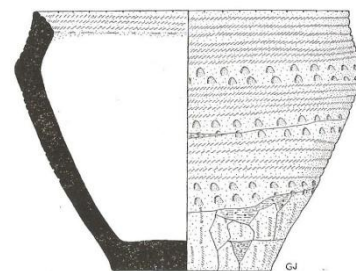


Figure 3.14: A bipartite food vessel from West Lilburn (from Jobey 19, 375)

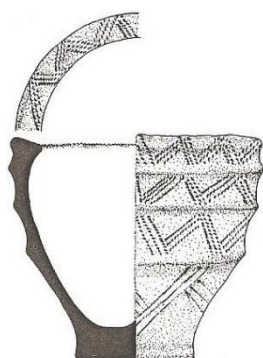


Figure 3.15: A tripartite Food Vessel vase from Cheviot Walk (from Stopford et al. 1985)

Ridged vases have horizontal cordons with cavetto zones in between them running the entire body of the pot (Figure 3.16) (Gibson 1986: 36). They usually have opposing decoration within the cavetto to emphasize the changing shape.

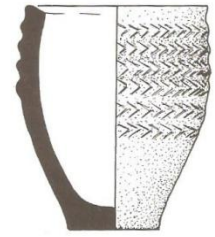


Figure 3.16: A ridged vase from Knocken, Lanarkshire (from Gibson 2002a, 94)

Bucket-shaped Food Vessels are much plainer and are named for their globular or flower-pot shape (Gibson 1986: 36). It is possible that this may relate more to contemporary domestic pottery. Indeed, Burgess' (1995) work on Early Bronze Age domestic pottery in the Scottish Borders and Northumberland has demonstrated a variety of forms, loosely related to the funerary Food Vessel tradition that is known, and the bucket shape does tend to be especially prevalent.

Food Vessel Bowls

Food Vessel bowls are found in three basic forms: waisted, with a cavetto halfway down the pot (a northern variety); northern Tripartite bowls, where cavettos divide the pot into three equal parts; and Ridged bowls where multiple cordons create ridges along the sides of the pot (Figure 3.17) (Gibson



Figure 3.17: (left) A Food Vessel bowl from West Water Reservoir, West Linton, Peeblesshire (from Hunter 2000, 144); (right) a Hiberno-Scottish Food Vessel bowl from Villa Real, Tyne & Wear (from Blackbird 1828, 314)

1986: 38-40). The globular British bowls have a wide distribution and are open and flat-based, but as with Food Vessel vases, the decoration becomes more prevalent and complex on vessels in the north and west (Gibson 1986: 36-8). Cowie (1978: 28) suggests that this may indicate a longer continuation of influence from more persistent Neolithic traditions in the northwest of England and southwest of Scotland; however, as with the greater complexity in the Rinyo substyle of Grooved Ware in Scotland, particularly in the north towards Orkney, where it is thought to have been developed, it could also suggest that this is the place where this type of Food Vessel originated. Hiberno-Scottish bowls, part of ApSimon's Irish bowl tradition and Cowie's (1978: 19) Irish-Scottish vase group, are found in Ireland and are thought to have spread into Scotland and the north of England. They are identified by their

ornate decoration and are known particularly for the use of false relief as a decorative motif amidst an incised/grooved or impressed background (Cowie 1978: 25; Gibson 1986: 38).

Food Vessels are generally found in the same contexts as Beakers, with inhumation and cremation burials and similar grave goods, and are frequently found in the same burial mounds or flat cemeteries. This strong sense of continuity in burial practices and ideology starkly contrasts with traditional beliefs that Food Vessels represent an underlying Neolithic culture, "...continuing unaltered and relatively unaffected..." by Beaker subjugation (Gibson & Woods 1997: 69).

Contemporary ceramics are also found on domestic sites, giving evidence that the Food Vessels known from the graves represent a purely funerary aspect of the tradition. In a study of Early Bronze Age unenclosed platform settlements, Burgess (1995) demonstrated that pottery used for everyday retained the decorative style known from Food Vessels, but were made in more functional forms. "One must assume that the domestic ceramics of this area utilised the decorative techniques, but not the forms, of contemporary funerary pottery" (Burgess 1995: 150). Tubs, buckets, barrels and bipartite vessels have been found on domestic sites, with both bevelled and rounded rims. Decoration is consistent with the funerary pottery, but Burgess (1995: 150) notes a progression over time from styles of whipped cord, comb and dentate line with some twisted cord, to twisted cord without whipped cord, comb or zoning, to zones of crude linear slashes and impressions. However, the sense of continuity is felt at the domestic sites as occupation often begins in the Food Vessel period and continues to the Middle Bronze Age.

Cinerary Urns

It was originally believed that during the Neolithic- Bronze Age transition, there was a move from inhumation burial to cremation; however, as more evidence has been found, it is now known that the period was more complicated and change was more gradual than abrupt (Gibson 2007; Kavanaugh 1976). Cremation burials are found in the Late Neolithic and accompanied by Beakers and Food Vessels, but it is with the Cinerary Urn tradition that cremation becomes the norm. At this point the pots found in burials are used as an 'urn' in Longworth's (1961: 264; 1984: 3) sense of the word, a vessel that actually holds the cremated

body of the deceased, rather than an ‘accessory’, or accompaniment, to the dead. Variability can still be seen within the Cinerary Urn tradition across space and time.

Thurnam (1871) was the first to mention cinerary urns, placing them into two groups: Overhanging Rim and Moulded Rim. Nearly forty years later, Abercromby (1907) revisited the pots and combined these groups into a single ‘Overhanging rim’ category. The rest of his data was defined in four other categories of cinerary urn: Southern groups, Deverel-Rimbury, Cordoned Urns and Encrusted Urns (Abercromby 1907: 185). Initially, Abercromby (1907: 186) believed that the tradition was brought to Britain from Europe via the southwest of England and spread north and east, but by 1912, he had changed his mind, suggesting that Cinerary Urns were a British development from Food Vessels (Abercromby 1912; Longworth 1984: 1). During the following 80 years, aside from Piggott’s (1936) and Childe’s (1940) publications, which considered the prehistory of Britain as a whole, Cinerary Urns were mainly considered on a local level: Patchett (1944; 1951) (Cornwall), Powell (1950) (Leicestershire), Musson (1954) (Sussex), Smedley and Owles (1962) (Suffolk), Kennett (1970) (Bedfordshire), Gibson (1978) (northeast England), Grimes (1951) (Wales), Kavanaugh (1976) (Ireland) and Morrison (1968) (southwest Scotland). Certainly, no analysis of the tradition as a whole was considered until Longworth’s (1961, 1970, 1984) work on Collared Urns.

Collared Urns

The term ‘Cinerary Urn’ is used as an all-encompassing term to refer to the many forms of funerary pottery known from the later part of the Early Bronze Age. The best known traditions of these are the Collared and Cordoned urns, the former being the only tradition found universally through the British Isles. Collared Urns are recognizable from their heavy collar, truncated body and narrow bases (Figure 3.18) (Gibson 1986: 42). Most are found inverted and containing cremated remains and it is thought that the pots may have originally been sealed with a cloth or piece of leather tied around the opening, presenting a functional purpose for the collar.

Since Abercromby (1907: 192), it has been generally accepted that Collared Urns were first made in a bipartite form (composed of a collar placed on a body), but over time a cavetto was

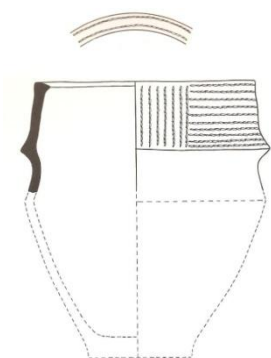


Figure 3.18: A Collared urn from Milborne 14, Dorset (from Longworth 1984, plate 215)

incorporated into the design between the collar and body to form a tripartite vessel (Gibson 1986: 42). It is Longworth's full-scale analysis of Collared Urns on a national scale in the 1970s and 1980s that has contributed to a fuller understanding of the tradition, its regional differences and development over time. Longworth (1984) describes eight basic forms for Collared Urns (Figure 3.19), but overall, the rims are simple or internally moulded (subdivided by Longworth (1984: 5) into four types: simple, expanded, multi-internally bevelled and externally bevelled). Collars are defined as: convex, straight, concave, S-shaped, or complex, and bases range from simple to pedestalled (Longworth 1984: 6-7). Collared Urns tend to be more sparsely decorated than Food Vessels, with motifs focused on the collar, cavetto and only just below the shoulder of the vessel (Gibson 1986: 42; Longworth 1984: 8). Motifs continue to be geometric, incorporating twisted, whipped and plaited cord, incisions, grooves, comb, stab & drag and impressions into designs of herringbone, filled triangles, lattice, encircling lines, horseshoes, zigzags and crescents (Gibson 1986: 42; Longworth 1984: 8-9). Longworth's analysis of Collared Urns in the 1960s and 1970s enabled him to define two temporal series of style that are fully described in his 1984 corpus of the tradition (Figure 3.20). The First Series comprises the vessels that developed out of the Food Vessel tradition and demonstrate characteristics typical of previous wares stretching back to the Mortlake and Fengate styles of Impressed Ware, such as repeated herringbone and short-line motifs, the use of whipped cord, internal moulding of the rim and decoration therein (Longworth 1961: 267-8; 1984: 21). Longworth's Second Series, in contrast, represents the vessels made later on when the tradition had matured and largely abandoned traits typical of earlier types of pottery (Longworth 1970: 662; 1984: 29). Style becomes more regional, notably with a distinct north-western category, found in Cumbria, south-west Scotland and Northern Ireland, and a south-eastern group, centred in southern England. Overall, rims become heavier, more concave, undecorated and are no longer moulded (Longworth 1984: 29). Whipped cord and herringbone are much less employed and the geometric designs that ornament the vessels become more complex to include filled triangles, lattice and hurdles.

Figure 3.19: Longworth's (1984: 7) Eight Basic Forms for Collared Urns in Britain and Ireland

Tripartite	Form	Variations
	I. Angled/vertical collar, concave neck, well-marked shoulder, trunco-conic-ogee body.	IA. Vertical neck. IB. Asymmetric concavity in neck. IC. Angled neck with a

		wider shoulder than neck, placed right below the shoulder.
	II. Angled collar with an equal depth as the neck. Neck angled –straight, shoulder sharp, body tunco-conic –ogee.	IIA. Stepped shoulder.
	III. Angled collar with a diameter equal or less than the neck, vertical or straight neck, body trunco-conic (occasionally ogee).	IIIA. Sharp shoulder. IIIB. Weak shoulder.
	IV. Angled collar with a depth equal or less than the neck, vertical or s-shaped neck with pinched cordon at shoulder, body ogee (occasionally trunco-conic).	
	V. Angled collar with a depth equal or less than the neck, convergent neck, shoulder with pinched cordon, body trunco-conic or ogee.	VA. Straight or slightly convex neck. VB. S-shaped neck.
Bipartite	BI. Angled collar, globular body with recurve under collar with maximum diameter underneath.	
	BII. Angled collar, convex body without recurve, with maximum diameter at the base of the collar.	
	BIII. Angled collar, convergent, straight-sided form, such as a truncated cone.	

Fig. 3.20: Details of Longworth's Primary and Secondary Series of Collared Urns (Longworth 1961, 1970, 1984)

Primary Series	Secondary Series
<ul style="list-style-type: none"> ● internal moulding on rim ● simple pointed or flattened rim, or simple-unexpanded rim bevel ● collar with convex or straight external surface ● internal decoration other than on rim or rim bevel ● herringbone or short, repetitive line motifs (whipped cord, twisted cord, incised, etc...) on the collar/neck ● decoration below the shoulder on external surface ● use of whipped cord as motif 	<ul style="list-style-type: none"> ● rims heavier and more concave ● s-shaped collars ● no rim moulding ● no internal decoration ● more complex geometric designs (filled triangles, lattice, hurdles, etc...) <p>North-western style:</p> <ul style="list-style-type: none"> ● forms III, V ● use of linear incision ● lattice and lozenge designs on neck ● jabs on shoulder <p>South-eastern style:</p> <ul style="list-style-type: none"> ● form BII and BIII ● use of point-toothed comb ● use of horizontal, vertical and diagonal lines on the collar ● use of horseshoe motif on the shoulder

In 1986, Burgess critiqued and refined Longworth's criteria for Collared Urn classification, but largely kept his scheme.

Vase Urns

Within the Cinerary Urn tradition, several regional variants have also been known since Abercromby's publication in 1907. Gibson (1986: 46) discusses Abercromby's Southern Group, including the Trevisker series, a flowerpot-shaped domestic ware with incised and cord-impressed decoration in herringbone motifs that are found in the southwest of England,

and the Cornish Handled urns, a series that is part of the Trevisker group, but the only type of cinerary urn with handles (Figure 3.21).

Biconical urns, also from the south of England, are characterised by a carination at the waist and narrowing towards the rim. Incision and fingernail impressions are the most common decorative motif on this style of pottery. In Ireland, the Scottish lowlands and northern England, a variable collection of urns, known in the past as Encrusted Urns and

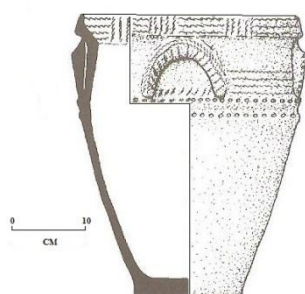


Figure 3.21: A horseshoe handled urn from Corfe Castle, Dorset (from Gibson & Woods 1997, 188)

Enlarged Food Vessels, are now known as Vase Urns (Figures 3.22 & 3.23) (Longworth 1961; ApSimon 1969; Sheridan 2003). Burgess (1986: 349) suggested in his commentary on Collared Urns that Vase Urns developed out of the Food Vessel tradition for different burial practices that involved the placing of cremated remains inside a vessel. They, thus, inspired the first Collared Urn users in the adjacent areas that did not used Food Vessels. Indeed, the earliest dates for these vessels in Scotland place them within the end of the Food Vessel sequence, at c. 2150-1950 cal BC (Sheridan 2003: 203). Their form follows the Food Vessel tradition as they have moulded, bevelled rims with vase-shaped bodies and flat bases and the Bipartite and Tripartite shapes of Food Vessels continue. The decoration on these vessels also keeps to the motifs known for Food Vessels and incision, grooving, cord impressions, stabmarks and stab & drag are all used, and ridge stops divide the neck bevels just as with Food Vessels. In the case of Encrusted Urns, applied decoration, in the form of curvilinear lines, encircles the rim and pellets are added to the repertoire of motifs.

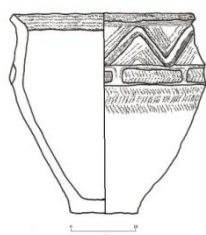


Figure 3.22: A Vase urn, previously called an Enlarged Food Vessel, from Uddingston, Lanarkshire (redrawn from ApSimon 1972, 144)

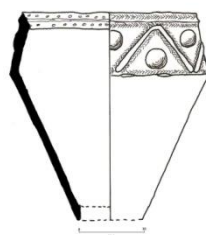


Figure 3.23: Vase urn, previously called an Encrusted Urn, from Bedrule, Roxburghshire (redrawn from ApSimon 1972, 144)

The presence of Vase Urns, however, does denote a change in Bronze Age cultures and demonstrates a clear connection to the Collared Urn tradition. As with Collared Urns, Vase Urns are decorated only on the upper part of the vessel near the rim and the contexts in which they are found (inverted and containing cremated remains) demonstrates a continuity of activities through the British Isles that is connected to changes in the burial tradition of which the Collared Urn tradition is apart (Burgess 1986; Sheridan 2003: 215-6; 2007).

Cordoned Urns

The distribution pattern for Cordoned Urns clusters on the same diagonal range as Vase Urns: from the mid/northeast of Ireland, to the Isle of Man, through southern Scotland and the north of England, ending at the northeast Scottish coast (Kavanagh 1976; Morrison 1968; Waddell 1995; Gibson 1984: 49; Sheridan 2003: 203-4). The range of radiocarbon dates place the inception of this form to c. 1800/1700 cal BC and they continued to c. 1500 cal BC (Sheridan

2007: 169) Sheridan (2003: 215-6; 2007: 169) believes that they represent a type of local cinerary urn concurrent to both Collared Urns and Vase Urns that share ‘manufacturing choices’.

Cordoned Urns are found in both bipartite and tripartite forms with horizontal applied cordons that separate the pot into zones (Figure 3.24) (Gibson 1986: 49). They are usually bucket- or barrel-shaped and have simple, flattened or internally bevelled rims. Decoration is usually haphazard and basic, using motifs of herringbone, lattice and chevrons in twisted and whipped cord and incision (Morrison 1968: 89; Gibson 1986: 49). A

novel motif found on Cordoned Urns is the ‘pseudo-cordon’, which is made by parallel incisions placed close together (Waddell 1995: 116). Associated artefacts include objects of bronze (awls, pins, knives and razors), flint flakes, plano-convex knives, fabricators and axes, and in some cases, faience beads have been found (Kavanagh 1976: 324-327).

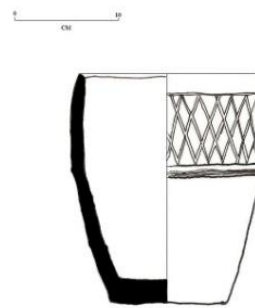


Figure 3.24: Cordoned Urn from Drumelzier, Peeblesshire (redrawn from ApSimon 1972, 144)

Bucket Urns

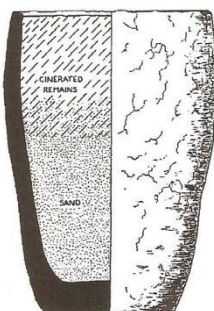


Figure 3.25: A Bucket urn from Glenluce (from Sheridan 2003, 212)

In addition to the more uniform styles of Vase Urns and Cordoned Urns, a variety of vessels found in the same contexts as the rest of the Early Bronze Age tradition have been given the name of ‘Bucket Urns’ (Figure 3.25) (Sheridan 2003: 210). They vary in shape and size, but all tend to have a basic bucket shape with a flat base and they date to the very end of the Bronze Age urn period, approximately 1600- 800 cal BC (Sheridan 2007: 169), which places them in a contemporary position to ‘flat-rimmed ware’, known from domestic sites. Most are undecorated, have a coarse, crumbly fabric and, in contrast to earlier urns, are found upright, containing cremated remains. Sheridan (2003: 211) suggests that, “...the use of Bucket Urns – in southwest Scotland, at least – may have evolved as a late, variant practice by those who had formerly been using Cordoned Urns.”

Accessory Vessels

In addition to the vessels known from the urn traditions, other smaller pots, or cups, have been found accompanying the cremation, or mixed with it in the urn. Antiquarians referred to these as incense cups (since many have two, parallel perforations in their sides) and pygmy cups (on account of their small size) (Gibson 2004: 271). Gibson (2004: 271) simply refers to them as ‘cups’ or ‘Accessory Vessels’ since they are found in *accessory* to the rest of the burial. Longworth (1984) attempted to categorise these cups in his corpus on Collared Urns, but in truth, their form and style is much more variable than any other tradition. His result was 11 types and 7 subtypes. For Scotland and northern England, Gibson re-evaluated 72 Accessory Vessels and refined the scheme to 8 types, although there is overlapping and variation, still, in their characteristics (Figure 3.26).

Figure 3.26: Gibson’s (2004) classification of Accessory Vessels.

Gibson’s Category	Longworth’s Category
1. Thumb cups with rounded bases (as with crucibles)	#11
2. Splayed cups with flaring sides and narrow bases	#7, 8
3. Vertical-sided cups	#6
4. Globular hemispherical or closed cups	#9
5. Distinctly shouldered biconical cups	#5, 10
6. Miniature Vase Food Vessels	#3
7. Miniature Collared Urns	#4
8. Fenestrated wall cups	#2

Small vessels, such as these, are known from the Impressed Ware and Grooved Ware repertoires, and they may have their origin in the domestic sphere (Gibson 2004: 274-5). However, in this context, their purpose is much harder to understand. Gibson (2004: 275) suggests that they may have been the result of novices practicing their craft on smaller pots, or the cups might have been fired in the cremation pyre with the body as part of the ritual to transform both bodies in the same fire. A few (10/72 examined) are obviously wasters (Gibson 2004: 282). The perforations in the side of many Accessory Vessels have been interpreted as breathing holes through which narcotic fumes might have been inhaled, or they could have been used to suspend the vessel (Gibson 2004: 277). Greenwell noted that the bases of these vessels were more often decorated than the traditions they accompanied and so

the angle at which they would have hung would display this; however, Gibson notes that none show significant wear at the perforations. Perhaps looking for a single interpretation, simply because the vessels are all small, is dangerous (Gibson 2004: 277). The fact is that Accessory Vessels are more variable than the other traditions and a contextual approach is necessary to fully appreciate their role in Bronze Age funerary activity.

A chaotic continuity

What this evidence seems to point to, then, is an ever-changing repertoire of ceramic types that were used for burial at the beginning of the second millennium BC, which were consistently used to inter the dead according to reasonably strict and consistent widespread tradition. It is the variation in the south and southwest and the seemingly uniform Cordoned Urn tradition in the north that led Abercromby (1912) to first propose that the Cinerary Urn tradition began in the south and spread northwards to replace Food Vessels. He believed that Cordoned Urns represent a late, ‘degenerate’ form, of Collared Urns (Abercromby 1907: 191) and, probably for the reason that they were largely unstudied until Morrison’s (1968: 80) work in southwest Scotland, this was largely accepted. However, in the latter part of the 20th century, this view began to change with ApSimon (1969, 1972) and Longworth (1984) and Cordoned Urns were seen as a distinct ware within the Cinerary Urn tradition.

Sheridan’s (2003; 2007) reports of the dating programme, carried out by National Museums Scotland, supports ApSimon and Longworth, but the results of this work has revealed much more than they could have hoped to achieve in the 1960s and 1980s. The evidence with which ApSimon and Longworth had to work displayed great variation across Britain where Cinerary Urns were found in a general context of a pit with cremated remains, but with a varied set of associations. This could include the bones of an individual, ash and pieces of charred wood, along with grave goods, or could simply have had a few charred bones that were washed for burial; some pots were found upright, containing the bones, but in most cases, the vessel was found inverted over the burial. In some places, one individual was found in a single pot, but especially in cases of females, more than one individual was often present (usually children or neonates). Burials were often marked by a barrow or round cairn (many were re-used since the time of Beakers), but others were found in flat cemeteries. Although much of this was correctly concluded to be the result of local interpretations of a wider set of ideas and practices moving across the country, the recent dates also show that much of this

variation was as a result of local variability and changes over short periods of time in a more flexible tradition than perhaps ApSimon or Longworth envisioned. Clearly, the basic idea of cremating the dead and burying the ashes with a vessel and grave goods is a common theme over space and time, but it seems this custom was rather more of a fluid than a rigid practice. Different types of pots may not necessarily denote different cultural groups interpreting the same impetus (Collared Urns) and then keeping the same practice over the entire urn period. Instead, the dates and data demonstrate different practices and different types of vessels coming in and out of use, which suggests that personal creativity could be used to commemorate the loss of a loved one within a basic set of practices and the various forms of urns form a continuation of changing style (Sheridan 2003: 216; 2007).

Discussion

The theme that seems to form a common thread through all of the traditions from the Late Neolithic to the end of the Early Bronze Age is one of regional variability woven into a common cultural backdrop. The evidence from Impressed Ware to Cinerary Urns demonstrates that similar types of pottery were found attractive to people who lived in places far apart – that they shared a common aesthetic – and yet, each tradition in the study area also has its own regional style. This is something that is long-lived and seems to become more complex over time. Beakers are seen as the only type of pottery that form a direct link across to mainland Europe, but perhaps this is not so significant when one considers the continuity of lifestyle, diet and burial in Britain. Moreover, Beakers may travel across water and their presence in Britain may indicate cultural links across the English Channel and the North Sea, but surely this cannot be surprising if links with Ireland were as strong as is suggested by the similar monuments, occupation sites and burial practices that are found on both sides of the Celtic Sea from the beginning of the Late Neolithic onwards. It seems clear that the remains we find from the third and second millennia BC show an underlying ‘grammar’ of culture that is maintained through a vast network of social connections over a very long time. The people in each region are aware of their neighbours and of the material culture that is exchanged further afield and they live in a dynamic world of changing fashions, ideology and progressing technology. To the individual living in the Neolithic or Bronze Age, the world may have seemed as ever-changing and progressive as it does to each of us living our lives

today. Culture is not stagnant and a person living within one will experience this change amidst continuing traditions.

Part of the trouble identifying this in the archaeological material lies in the fact that our record is incomplete; we only see stationary points along a progression of time. We focus on these points and thus miss the bigger picture. It is easy to see the differences between Impressed Ware and Grooved Ware, or Beaker and Collared Urns, and the similarities between Impressed Ware and Food Vessels, and when focusing on this, it is easy to forget the vast amount of time that passed whilst those changes occurred. Impressed Ware may be different from Grooved Ware, which in turn is different from Food Vessels, but they were also made by different generations of people who did not know one another. It is a lack of evidence that makes it difficult to see in between the points. It is without a doubt that if more prehistoric pottery survived, we would see greater differences within the traditions across space and time.

Additionally, it is the tradition of how we study archaeology that influences the way we interpret past material. Following the initial cultural divisions from the origins of prehistoric studies, we continue to divide the ages into stone, copper, bronze and iron and attempt to ‘fit’ the evidence into these. As a consequence, we oppose the Neolithic to the Bronze Age, even if it may not be so, and cannot agree where Beakers should be placed because they are associated with bronze in some places, but not in others. This is further compounded by the fact that the majority of ceramic finds in the Late Neolithic come from domestic sites whilst those of the Bronze Age are largely funerary. Indeed, in this study, 80% of the Bronze Age pots inspected had come from burials, most of which were excavated during the antiquarian period.

When the few burials from the Late Neolithic are considered alongside the few Early Bronze Age domestic sites, the evidence again is not so opposing. And it is this continuity that should be startling, this fact, that amidst dynamic cultural change, the underlying culture at its very core can be seen to continue and thrive. Beakers may represent a foreign ‘intrusion’ into Britain, but the way in which they are used (in burials under mounds) is starkly similar to burial associated with Neolithic pottery, such as at Duggleby Howe in Yorkshire. Barbed-and-tanged arrowheads, a distinctly Early Bronze Age lithic that is associated with Beakers, are found also with Food Vessels. Plano-convex knives continue in use for centuries, and many types of artefacts (awls, knives, axes) continue to be found in the same contexts,

although the material of which they are made changes. Burial mounds that have initial Beaker burials at their cores are often built on top of Neolithic monuments and are used for generations until the end of the Cinerary Urn tradition. Domestic sites, such as Glenluce and Hedderwick, show a mixing of ceramic material from Impressed Ware to the Iron Age. And unenclosed platform settlements, such as Standrop Rigg and Houseledge, have houses that were built on top of Late Neolithic activity.

Perhaps it is with these trends in mind that new studies of the ceramic traditions need to be conducted. The contributions of Longworth, Clarke, Burgess, Waddell, Manby and several other have provided a solid foundation from which to consider prehistoric pottery at a regional level in Britain. In the Tyne-Forth region, the work of Isla McInnes, who analysed and summarised the Neolithic pottery of Scotland and northern England (McInnes 1969), as well as Roger Miket (1981; 1984; 1987), who brought together the Neolithic ceramic evidence of the Milfield Basin and its relationship to the surrounding region, built upon Longworth & Wainwright's foundation. Manby's (1974; 1999; 2004) ongoing work in Yorkshire on Neolithic Impressed Ware, Grooved Ware and Bronze Age wares has created a body of information against which the data from the Tyne-Forth region can be compared and it is this that enables the regional differences and similarities to be seen. And Gibson's (1981; 1986; 1997; 2002a; 2002b) work, which focuses on this region, has created a body of knowledge of the manufacturing processes and uses of ceramic vessels from the Early Neolithic onwards. Although Clarke's, Longworth's and Cowie's efforts have been on a national level, many of the vessels that they studied were from the Tyne-Forth region and so their work remains essential.

However, it is a pertinent fact that, since 1984, no corpus of any pottery type has been published, although many small-scale projects have increased our dataset significantly. Radiocarbon dating has also improved, both with the refinement of the calibration curves and with the development of machinery to secure more accurate dates from smaller quantities of material. Thus, there are now many more secure dates, many of which have been taken directly from residues on the pots. Scientific developments in residue analysis and petrology are enabling more specific data to be derived from pottery that could be significant when considering the traditions as a whole. It seems clear that it is time to reconsider the evidence. The work of this thesis attempts a step towards this. It has been conducted in the attempt to consider culture in the Late Neolithic and Early Bronze Age in one region and it is sincerely

hoped that this will contribute to a better understanding of these periods in other parts of the British Isles.

CHAPTER 4: PREVIOUS ARCHAEOLOGICAL RESEARCH AND SITES SUMMARY

The Tyne-Forth region does not have as many upstanding and imposing monuments as other parts of Britain and so archaeological remains are not always so obvious; however, interest in archaeological remains has as long a history in the study area as elsewhere. There is some evidence for very early interest in burial mounds in the form of intrusive material in robbed parts of the monuments. At High Knowes (Northumberland), Roman/Iron Age sherds of pottery were found as a later disturbance in the Bronze Age burial cairn 4 and in both cairnfields A and B at this site, many of the burials were extensively robbed (Jobey & Tait 1966). Also, at Cairny (Lanarkshire), a vertical shaft was found in the centre of the mound that disturbed the central burial and contained sherds of Medieval Greenware (Maxwell 1976: 303). It is probable that much of this robbing was done to obtain the valuable gold, copper and jet objects that are sometimes found in Beaker and Food Vessel burials. Clearly, any superstition surrounding the disturbance of the dead that might have deterred some in pre-Enlightenment England and Scotland did not affect everyone. It was not until later, however, that the interest in the past and the excavation of sites became a more routine endeavour.

The Antiquarian Period

The very first Antiquarian mention of the archaeology of the Tyne-Forth region was made by Camden in his *Britannia* in 1586. His description of the area begins with the Romans and largely follows their historical records (Holland 1607). The rise of Antiquarianism, however, began in the late 1600s, and it was in 1707 that the Society of Antiquaries of London was established to record and study remains (Evans 1956: 35). Although it had a shaky foundation, by 1715, the society was well-established and popular.

The Society of Antiquaries of Scotland was established in 1780 by David Steuart Erskine, the 11th earl of Buchan (1742-1829) (Cant 1981: 1-2). As a product of the Enlightenment, he was a scholar of many subjects and had studied at St. Andrews (1755-9), Edinburgh (1760-2) and Glasgow (1762-3), but his primary interest was in the past (Cant 1981: 4-10).

The union of the kingdoms had brought an opportunity to consider antiquities with less controversy; however, one cannot help but assume that the avid interest in preserving the past at this time was also fuelled by the fear that the new union may cause a loss of Scottish identity. Indeed, many of the titles of the articles in the first proceedings reflect this (*Archaeologia Scotica*, 1792). The way in which the Society of Antiquities of Scotland was set up to function, however, embraced the optimism of the period. The preservation of knowledge, communication with other scholarly bodies, such as the Society of Antiquaries of London and others in Continental Europe, served to not only make Scotland's past accessible, but to place it within its broader scope (Ash 1981: 93).

Not long after this, in 1813, the Society of Antiquities of Newcastle upon Tyne was established to record the antiquarian work being undertaken in Northumberland (Miket 1987: 17). Interest by Hugh Percy, 2nd Duke of Northumberland (1742-1817), Hugh Percy, 3rd Duke of Northumberland (1785-1847) and Algernon Percy, 4th Duke of Northumberland (1792-1865) encouraged the recording of finds and the surveying of the county (Miket 1987: 18). They funded excavations for Sir David William Smith at their estate at Weetwood, near Horton, and commissioned surveys of the archaeological remains of various parts of the county.

This inspired many local people to begin to record the location of monuments and to dig them for treasure. John Grey of Milfield Hill mapped the monuments of the Milfield Basin in the 1820s to the 1850s and the Rev. William Procer, vicar of Doddington, recorded cup-and-ring carvings on the Fell Sandstones in his parish in the 1850s and 1860s (Miket 1987: 18-19). In Edinburgh, David Laing, then president of the Society of Antiquaries of Scotland, brought in a scheme compensating those who turned antiquities in and the society was inundated with finds (Ash 1981: 86).

The latter half of the 19th century saw the age of the mound-diggers who, with genuine interest in the past, searched for treasure. George Tate excavated the stone circle at Threestoneburn and at the hillfort at Yeavinger Bell in 1863, as well as at various sites in the Breamish Valley and at burial sites in Rothbury (Tate 1862). Canon Greenwell (1868, 1877) dug burial mounds at Ford Common, Etal Moor, Weetwood Moor and Doddington Moor. In the Scottish Borders, John Alexander Smith opened cists at Quarryfield and Drem, in East Lothian (Smith 1882) and described cup-and-ring carvings from Edinburgh (Smith 1874). The Hon. Lord Rosehill dug burials at Teinside (Teviotdale) (Rosehill 1870) and Lauder

(Lauderdale) (Rosehill 1872), whilst Lady John Scott (1870) led a series of excavations of mounds on her estate in Spottiswoode (Berwickshire). In the 1870s-1890s, Joseph Anderson (1879; 1883; 1886; 1894) led an extensive career focusing on Bronze Age burial in barrows and cists throughout the Scottish Borders, and in the final decade of the 19th century, David Christinson (1887; 1894; 1895; 1897; 1898) worked extensively at the hillforts in Peeblesshire and Roxburghshire.

Although part of the mound-digging tradition, Greenwell and Anderson, in particular, are remembered for having been amongst the better antiquarians in terms of record-keeping and including details of context, content and location of finds. Greenwell is well remembered for attempting to record the details of his sites in two volumes of information of his life's work; and it was Anderson who promoted excavation and wrote about field methods and preserving artefacts (Stevenson 1981: 162).

Perhaps the biggest advancement of the antiquarian period, in terms of data that continues to be useful today, was with Henry MacLaughlan and his surveying work in Northumberland. In 1850, MacLaughlan was appointed by Algernon Percy to survey the archaeological sites between Durham and the Scottish border (Charlton & Day 1984: 18). He then moved onto survey Hadrian's Wall and its environs and then, in 1860-64, MacLaughlan, at the age of 70, surveyed the Cheviot Hills (Charlton & Day 1984: 25). Mclaughlan's work resulted not only in detailed maps, but also in a document that was published by the Archaeological Institute where he described the sites he had recorded (MacLaughlan 1858). As a geologist and professional surveyor, Mclaughlan noted not only the sites themselves, but is accredited with adding greater detail of the landscape, capturing its spirit, and providing a document still useful in modern landscape studies (Miket 1987: 19; Waddington 1999: 21).

The Antiquarian period is one that is accepted with reservation by archaeologists today. In some ways it was valuable since it initiated the subject to which we now devote ourselves and it preserved many artefacts that might have been destroyed or discarded during the Industrial Age when cities were growing. However, it was also ruinous since many 'relic-hunters' destroyed sites to obtain 'curiosities' that often ended up as conversation pieces on peoples' mantles and desks and, over time, lost their context. In many cases, the artefacts were lost amongst other knick-knacks in the parlour. Although many of the Antiquarians' finds were described in the *Proceedings* or *Berwickshire Naturalists' Club*, many of these artefacts are now lost or unlabelled and so they cannot be included in modern studies. A prime example

can be found in a report by Jobey (1965), which outlines a particularly interesting Bronze Age pot he discovered in a rumble shop in the 1960s. Other than its type, he could say nothing more about its provenance or origin. It is obvious that an attempt was made by some to salvage as much information as possible. This can be seen in the records made by Canon Greenwell and by the editors of the *Proceedings of the Society of Antiquaries of Scotland* and the *Society of Antiquities of Newcastle*. It is also true that there were Antiquarians who did try to establish standard field methods for excavation, such as Angus Graham (1853), and others who promoted the use of scientific methods to approach artefacts, such as the analysis of residues and use-wear. So it is with mixed feelings that this corpus of information is approached in this study – gratitude that something survives from these activities, but reservation regarding their accuracy.

The Beginnings of a Scientific Archaeology

By the end of the 19th century (and over 100 years of collecting), the museums in Edinburgh and Newcastle contained thousands of artefacts. Indeed, from the turn of the century until the 1920s, the excavation of new sites seems to have slowed and archaeologists turned their attention to the research of material already known (Stevenson 1981: 174). For example, Abercomby (1907; 1912) compiled his corpus of Bronze Age pottery that remains to this day an authority on the subject. Fred Coles (1901; 1906; 1907) wrote a series of papers in *PSAS* discussing stone circles throughout Scotland, Ludovic Mann (1918) wrote on the use of stone in prehistory, and H. Craw (1921) summarized what was known about hillforts. The salvage excavation of sites did continue and famous excavations, such as Alex Curle's (1908) work at the domestic site, Archerfield (East Lothian), and the cist burials at Longniddry and Port Seton (Curle 1918), were the result of these chance finds.

It was 1931 when David Short excavated and recorded three burial cists on his father's farm (Miket 1987: 22). His report is thought to represent the first modern-style published site report in the county and marks the beginning of a rich archaeological record. In 1932, James Craw was digging cairns in Northumberland and in 1935, he dug at Duddo Stone circle. Nancy Newbiggin (1935) re-examined Greenwell's finds, establishing a sequence of the known ceramic material for the region, and R. Hedley (1924), and then later, Hoggs (1947), published regular gazetteers of known sites (Miket 1987: 22-23; Waddington 1999: 21).

In the Scottish Borders, Traprain Law continued to be excavated by Cree (1923) through the 1920s and at this time, Graham Callander and Prof. Alexander Low began their work on Bronze Age burial cists and pottery that would continue for the following two decades (Callander 1922; 1929; 1930; Oliver & Callander 1929; Craw & Low 1932-3; Childe & Low 1939; Low 1940; Stevenson & Low 1940). In the 1930s, V. G. Childe led excavations of Iron Age hillforts at Castleraw Fort (Midlothian) (1933), Kaimes (1941) and Cairngryffe Hill (Lanarkshire) (1941).

The Technology of World War II in Use for Archaeology: 1945-1980

During the Second World War there was a reduction in fieldwork, particularly by younger archaeologists. In Northumberland, where much of the land was in use for air force training, archaeology was simply not viable, but after 1945, a new-found enthusiasm for the Tyne-Forth region resulted in more surveying, excavating and employing new technologies that came out of the war. During the 1940s and 1950s, the RCHAMS put great effort into compiling and completing records of what was known about the Borders region to that point (MacInnes 1984: 176). Site descriptions and gazetteers were published and many sites were excavated so that more could be determined about the region's past. Similarly, in Northumberland, it was in 1947 that Higgs began his surveys of Doddington Moor and Horton Moor, surveying monuments and archaeological sites for records on that side of the border. Work by Prof. Stuar Piggott and his wife, Margaret Piggott in Berwickshire in the late 1940s led Atkinson to excavate at the Overhowden henge in that county in 1950, and aerial survey, a product of WWII, was carried out by Prof. J. K. St. Joseph through the entire Tyne-Forth region, revealing many new sites.

In 1950, Atkinson surveyed the Coupland Henge and avenue that St. Joseph's work had revealed as cropmarks, and from 1953-62, Brian Hope-Taylor explored the rectangular features from the Anglo-Saxon palatial site of Old Yeavering in the Milfield Basin (Hope-Taylor 1977). Further aerial survey by Prof. N. McCord in the 1960s and 1970s led to the identification of more sites and demonstrated the concentration of ritual activity that is now known to have existed in the Milfield Basin complex (Miket 1987: 24). The settlement at Thirlings and pit alignments and henges at Whitton Hill and Ewart were then explored in the Milfield Basin by Roger Miket (1976, 1981, 1985, 1987), and the entire 'ritual complex' in the Milfield Basin was tested by Anthony Harding (1981) with key excavations at the

Milfield North Henge, Milfield North pit alignment, the avenue, Old Yeavinger and the Milfield South Henge.

In the Scottish Borders, work became more concentrated in the Cheviots in the counties of Peeblesshire, Roxburghshire and Lanarkshire especially. Piggott excavated at Hownam Rings hillfort in Roxburghshire (1948), Torwoodlee hillfort (Selkirkshire) (1950-1), and Braidwood Fort (Midlothian) (1957-8). Cists continued to be uncovered and excavated, particularly by C. Calder and R. Feachem (Calder & Feachem 1949; 1952; Feacham 1951), and later by Humphrey Welfare (1975; 1977), A. S. Henshall (1966; Henshall & MacInnes 1968), and J. B. Stevenson (1976). In 1976, Colin Burgess excavated the massive Neolithic palisaded site of Meldon Bridge and, later, explored the Bronze Age platform settlements on the Cheviot slopes at Houseledge, Black Law (1980) and Hetha Burn, in the College Valley and the cragline cemeteries at Goatscrag (1972). George Jobey, whose discoveries included the Milfield North henge, East Marleyknowe Henge, Ewart Park and West Akeld Steads, as well as the avenue connecting these sites in the Milfield Basin, also turned his attention to the unenclosed platform settlements and hillforts in the region and he excavated at Chatton Sandyford (Northumberland), Standrop Rigg (Northumberland) and Green Knowe (Peeblesshire) (Jobey 1968; 1978a), as did Feachem later in his career, excavating at Harehope (Peeblesshire) (Feachem 1960; 1961).

The technology gained in WWII also included the use of radiocarbon dating. Although a tool in its infancy at the time, requiring large amounts of material to obtain a single date with large margins of error, it was the first time sites could be dated using absolute dating. The enormous amount of work conducted in the 35 years after the war went a long way to advance understanding of the prehistory of the region and its chronology. So it is not surprising, really, that the first summaries of the region were not written until the 1980s (eg. Burgess 1984; Annable 1987; Miket 1987). Although these tended to be largely speculative, it was the first time that the information from the Tyne-Forth region could be considered as a whole and an image of the past could begin to be discerned. Thus began the landscape and regional focus that has dominated the work in the study area since.

Excavating Sites as Part of a Landscape and the Rise of Developer-funded archaeology: 1980-present

In the 1980s and 1990s, Miket continued his work at Ewart and Whitton Hill, but a greater focus was placed on understanding the Bronze Age sites in the uplands of the region. Jobey

(1981; 1983; Jobey & Jobey 1987) continued to work at the unenclosed and enclosed platform settlements in the Cheviots and T. Gates continued the aerial survey begun by St. Joseph and McCord throughout Northumberland. At the same time, Gibson (1981, 1982, 1983, 1986, 2002a, 2002b; 2007; Gibson & Kinnes 1997; Gibson and Woods 1997) focused his attention on the ceramics of Northumberland and conducted analyses and experiments to better understand their origin, manufacture and relationships in the region.

In the 1990s, much of the work was handed onto developer-funded archaeology as development increased in the region during this time of prosperity. Brophy (2006: 9) notes that while in 1985, 69% of fieldwork was academic and 31 % was developer-funded, by 2004, this had been reversed. This new strategy has been positive in that, locations that might never have been considered have yielded a whole range of sites, including full settlements, which were lacking in the record (for example, at Lamb's Nursery, Midlothian; Cook 2000). It also produced many more useful radiocarbon dates and evidence from numerous aspects of prehistoric life, such as ritual, burial, domestic and hunting sites that were less known. Developer-funded archaeology has also allowed for a greater focus to be placed on lowland regions, whilst in the past, the uplands were more concentrated upon (Phillips & Bradley 2004: 38). The negative side to the dominance of developer-funded archaeology, though, is that it has produced archaeology only where modern development has occurred (Phillips & Bradley 2004: 37) and so it would appear that prehistoric life concentrated along the A1, at the quarries of the Milfield Basin and at the edges of modern cities when this clearly will not have been the case.

In the past 20 years, the work in northern Northumberland has been largely conducted by Drs. Clive Waddington and David Passmore. Beginning with an excavation of the Coupland Enclosure/Henge for his MA thesis, Waddington (1996a, 1996b, 1997, 1999; Passmore & Waddington 2009) determined the monument to have been older than previously thought and suggested a settlement pattern for the region based on transhumance for Neolithic peoples in the area (although this has been contested by Edwards 2004). Then, a major landscape study of the Milfield Basin, having been in progress since 1995, was published for Waddington's PhD thesis in 1999. Further work in the Milfield Basin, the Breamish Valley, the Ingram Valley, at Howick Heugh on the coast, and Bolam Lake, in the interior, was conducted by Waddington's contract company, Archaeological Research Services Ltd. (ARS) in the past 15 years, which has increased the dataset for this part of the study area greatly. In addition, other contracting companies, such as Tyne & Wear Museums, The Archaeological Practice and

Durham Archaeological Services have excavated many sites, particularly in the southern portion of the county.

The academic interest that has been present in the region has not faltered with the dominance of developer-funded archaeology and it seems that the influx of data from the contract work has simply enriched the archaeological record used by academics. In addition to Waddington's academic work at Howick and the Milfield Basin before the founding of ARS Ltd., Topping's (2008) four-year fieldwalking survey of the southeast Cheviots in the 1980s by students from University of Newcastle upon Tyne resulted in an entire landscape of sites from the Mesolithic onwards in Northumberland. And in Scotland, many excavations of prehistoric settlements have enabled the information from the contract projects to be placed in an informed setting.

Regional Trends

There are 243 Late Neolithic and Early/Middle Bronze Age sites in the Tyne-Forth region that produced pottery. Although this count is more modest than other parts of Britain and, in many cases, each site only yielded one or two vessels, it is a sufficient enough collection to be able to make some general conclusions about the prehistory of the region and how it may have been different from other locations. The sites include funerary, domestic and ritual sites from all periods and many of these have proven to be multi-phased, which has allowed for an understanding of how they are connected through time. In addition to this, the recent excavation of several sites in the Tyne-Forth region, using modern excavation techniques, has enabled a suite of more accurate radiocarbon dates to better relate sequence, the analysis of ceramic residues to recreate diet, and a better recovery of finds to capture information from an area famed for poor preservation.

The results that are summarised here represent the general trends for the region from the Middle Neolithic Impressed Ware to the use of Middle Bronze Age urns. A detailed summary of each site on which the generalisations in this chapter are based is available in Appendix 1. Although the dates agree with what is known for the period nationally, the data from the Tyne-Forth region also demonstrates individual culture for the area. From a very early period, people in this region were aware of trends in culture elsewhere, but maintained their own culture and adopted ideas, objects and practices in their own unique ways.

Middle Neolithic – Impressed Ware – 3500-2800 cal BC

Impressed Ware is found on 15 sites in the study area. Associated radiocarbon dates have placed the use of this type of pottery in a timeframe that begins c. 3560-3440 cal BC and ends c. 2910-2790 cal BC (68% probability) (Appendix 12) (Millson et al., 2012). Radiocarbon dates obtained from Meldon Bridge place Impressed Ware into the same range in southern Scotland (Speak & Burgess 1999: 12, 14). There are more Middle Neolithic sites in Northumberland, particularly in the Milfield Basin, but representation and consistent evidence is found in all reaches of the Tyne-Forth region and it is the large site of Meldon Bridge (Peeblesshire), which gives the clearest picture of this period in a regional perspective. As a consequence, it would seem correct to infer that the occupation of the region was evenly spread.

The Emergence of the ‘Pit-diggers’: simple soil-botherers or ritualistic deposition?

All but one of the sites are thought to be the remains of domestic activity – most comprise the truncated bottoms of pits, hearths and postholes that contain the domestic refuse of charred hazelnut shells, sherds of pottery and lithics. However, two pits at the domestic sites of Thirlings (Miket et al. 2009: 17-19) and Meldon Bridge (Speak & Burgess 1999: 12) are of particular interest since they are ‘clay-lined’ or ‘potsherd-lined’. In both cases, the pits were subsequently used for discard, but the purpose of their original lining is obscure. Speak & Burgess (1999: 105) and Miket et al. (2009: 19) draw comparisons to Balfarg Riding School, where potsherd-lined pits were also found, and suggest it may have been one of many ways to line a pit for some form of preservation or processing of material. Indeed, Cunningham’s (2011) experimental work examined the effects of pit lining for the storage of wild resources, such as hazelnuts and acorns and found that the way a pit was prepared and the use of a lining, such as with a basket, affected the food in them as much as the initial processing, such as air drying and roasting. In particular for hazelnuts in pit 2, which had a more humid environment, this was optimal as it yielded the greatest quantity of sprouted hazelnuts after six months (Cunningham 2011: 20). It has also been suggested that clay-lined pits may be the result of processing non-food resources, such as clay, for potting. At the Prehistoric Ceramic Studies Group in Manchester in 2010, one of the professional potters in the group suggested

that clay-lined pits may have been clay-processing pits, where sherds were placed to decompose slightly so they could be used as grog in the next batch of pots. Whilst extracting the weathered clay, the potter would have left the clay that touched the surrounding soil so as to only use the best and cleanest portion of the supply. This would leave a clay-lined pit with sherds pressed into the sides that could be used for refuse thereafter (Taylor, pers. comm.). Since potting probably was done on a domestic scale, it would not be surprising to find this type of feature at a domestic site.

Pits are amongst the most common Neolithic feature and much effort has gone into explaining the purpose of those with more extraordinary fills. Pits have been recorded that have domestic-like contents, but contain unused, pristine tools or sherds from different pots that were purposely broken and placed in the pit. In many cases, there seems to be a correlation between burnt material being found with unburnt artefacts, which demonstrates the possibility of ritual surrounding pit-digging as a practice (Thomas 1999: 63-69). These actions have been titled “structured deposition” since the 1980s, where material is placed in a pit in a ritualized fashion to mark a spot and create memory for the social group (Pollard 2001; Thomas 1999; Garrow 2007). The practice would also take useful and often valuable things out of circulation in an act of conspicuous consumption, which would add significance to the act. In cases where pit contents appear to have been deposited in this way, there does not appear to be any uniformity to their fills, in fact, their contents and the placement thereof can vary greatly. It is simply in their impractical nature that they can be identified as different from everyday refuse pits or postholes. Although the contents of the pits are variable, what Thomas (1999: 63-87) describes this variability as a *bricolage* of material, and it is the act of digging the pits and placing the objects in a specific way in front of others to create a memory of the event that was uniform and important (Thomas 1999: 68-70). When a group or individual dug the pit at a certain location, placed symbolically-charged objects within and then covered them, that location and action would forever mark that spot and event in the memory of the people involved. Thus, it created a collective memory that united that group and reinforced its identity (Sherratt 1997). The clay-lined pits at Thirlings and Meldon Bridge, however, seem to reflect more the domestic activity known at Impressed Ware sites elsewhere. It is not to say that the pits could not have been the result of ritual action, but they do not appear to have the arrangement to the material that indicates structured deposition. The material appears to have been dumped and then the pit immediately backfilled (Garrow 2007: 14).

The Burial of the Dead

Funerary remains are a much less common association for Impressed Ware than for later types of pottery and until recently, it was believed that no contexts could be confirmed since there were so few finds and since so many of those finds were not well-documented enough for a burial context to be certain. The sherds found at Crookham near Ford, were first described by Canon Greenwell as the remains of funerary urns (Greenwell & Rolleston 1877: 403) and were later reconsidered by Longworth (1969: 258). During the days of ‘mound-hunting’, sherds that had been collected over several years by Captain Carpenter were brought to Greenwell for analysis. He concluded from their similarity to Early Bronze Age urns that they must have come from graves and inferred they were probably associated with jet artefacts, as he had seen in other (Food Vessel) funerary sites. The similarity of Impressed Ware to Food Vessels has been discussed for several decades (beginning with Smith 1910) and it is not surprising that Greenwell would come to this conclusion given the evidence from the burial cairns that dominated his finds. From the re-examination of the sherds, though, Longworth (1969: 260) placed the remains in the Peterborough Ware tradition and drew connections to the material from Hedderwick (East Lothian) and Glenluce (Wigtownshire). The possibility of a funerary context was not fully discussed by Longworth. The evidence from the cairn dug at Bewick (Northumberland) in 1865 by Shepherd is also compelling. A coarse sherd was found in the mound where a Beaker was buried in a grave. Longworth & Kinnes (1985: 134) list this sherd as a Food Vessel, probably because of its context; however, based on its form (with a bevelled rim top that slopes in and down to create a T-shaped profile and its grooved herringbone and lattice decoration) it is stylistically more similar to Impressed Ware. The records do not list a provenance for this sherd, though, and in particular if it was found in a burial, and if it is possible that it could be residual. More recently at Lookout Plantation (Northumberland), the remains of an Impressed Ware vessel were found in a pit with ash and charcoal (Monaghan 1994: 273). Monaghan (1994: 273) interpreted this site as an Impressed Ware burial.

Little is known about the funerary practices of the Middle Neolithic. It is known that the burial of disarticulated bones inhumed in long mounds comes to an end, but whether this ushers in a move to cremation remains uncertain. At Duggleby Howe, in Yorkshire, a large mound with the inhumation burials of 15 individuals and a further 53 cremation burials dates to the Middle Neolithic (Loveday 2002; Gibson & Bayliss 2009). The mound is situated in the ritual landscape near Rudston Wold where numerous Impressed Ware and Grooved Ware

finds have been made. It is these finds that have established the understanding of the pottery in this region (Manby 1974; 1999). Duggleby Howe would have formed a prominent part of the complex and its sheer size (37 m diameter) and surrounding features, including the segmented ditch (350 m diameter) would have made it a commanding ‘place’ in the land, much as the large monuments known in Wessex (Gibson & Bayliss 2009: 41, 71). It would seem that these key features of Duggleby Howe form a continuation of practice from the long mounds of the Early Neolithic to the henges of the Late Neolithic/Early Bronze Age. The recent radiocarbon dates determined by Gibson & Bayliss (2009: 64-5), which span c. 3630-3360 cal BC (burials H-K) to c. 2880-2570 cal BC (burial F) set Duggleby Howe within the timeframe of the ceramic traditions found across the landscape in which it was built. Thus, it can give insight into the funerary practice at the time Impressed Ware was made and it confirms that, in the Middle Neolithic, people did practice both inhumation and cremation in Britain. Mounds may have been less common and the remains from Lookout Plantation (a simple burial of cremated remains in a pit) may have been more usual. This is compelling given the frequency of Impressed Ware sherds that are found simply in the ploughsoil. These are usually thought to be remnants of domestic activity, but perhaps we should not be so convinced.

The Matter of Living in the Neolithic

The information from Duggleby Howe is also important in what it tells us about the lives of people in the Middle Neolithic. Montgomery et al.’s (2007) re-evaluation of the Duggleby Howe material included strontium analysis. Since it was built on the chalk uplands of Rudston Wold that has a very specific strontium signature, the measurements of this isotope in the remains of the people within the mound were startling. None of the people buried in the mound had been born or raised locally. In fact, one had a Sr signature that matched the geology of the Hebrides, Cornwall or the Paris Basin. Regardless of whether they came to the Yorkshire Wolds as adults, or if their remains were brought after they died, what this evidence provides is confirmation that people were capable of, and regularly did, travel long distances.

It, therefore, is disconcerting that the Impressed Ware sites in the Tyne-Forth region give much less evidence than other periods for any type of human activity. Even at the largest sites, Cheviot Quarry, Lanton Quarry and Thirlings, where Impressed Ware was found in

domestic pits, no associated structural evidence could be considered conclusive. At Lanton Quarry, four trapezoidal and three triangular arrangements of posts may represent structures, but Carinated Bowl, Impressed Ware and Beaker sherds were all associated with these and so it is difficult to say if the structures were built in the Middle Neolithic or if later people simply lived on the same sites as their predecessors (Waddington 2008: 23). Two groups of postholes and pits at Thirlings were associated with Impressed Ware: the first with a structure that is thought to have been ephemeral and the second was a row of pits, which ended with F466, the clay-lined pit already described (Miket et al. 2008). But again, very little remains of these, and later phases, were also marked by pits with Grooved Ware in the same places. Similarly, at Meldon Bridge, the largest assemblage of Impressed Ware was found in three clusters of pits, but greater structural evidence for houses is elusive. Meldon Bridge was a large site that was later enhanced with a timber palisade. Clearly, there were enough people living in the region during the Middle Neolithic to construct substantial structures and they were capable of doing so even though the evidence is unforgiving (Speak & Burgess 1999: 24).

It seems that part of our negative evidence has to do with the fact that later groups lived in the same places and so we find clusters of pits that date to different periods together. Without formal tools, pottery or material that can be radiocarbon dated in each pit, it is impossible to determine which are contemporary. In addition, if the structures were simply repaired and reused over centuries, the contexts of the pits would be even more confused. Furthermore, there is also the problem that erosion in most of the Tyne-Forth region has truncated many of the features and recent deep-ploughing has also destroyed many others. The clusters of postholes at sites such as Cheviot Quarry, Lanton Quarry, Thirlings and Meldon Bridge may not form alignments because they are only the largest, deepest few features that have survived from a more substantial structure that was more substantial than it appears (Bradley 2007: 44). Indeed, if only the roof supports from a Bronze Age round house could be seen, it would appear as a small collection of postholes without arrangement also. Finally, it could also be that what we seek may never have actually existed. Middle Neolithic people lived in this land and will have had to have shelter, but the structures may not have been post-built longhouses, as is known from central Europe or southern England (Whittle 1999), or even post-built, wattle-and-daub round houses, as in the Bronze Age. It is possible that substantial houses were being built, but simply in other ways. A lack of postholes may not necessarily

mean more ephemeral structures, but that houses were being built of different materials, such as out of turf.

It seems that the greatest leaps forward in understanding the Middle Neolithic of the region and differentiating it from earlier and later periods have been in the development of more accurate radiocarbon dating systems and in larger-scale excavations, as at Cheviot and Lanton. What the evidence can achieve at this point is to strengthen the argument for continuity through the Neolithic and into the Bronze Age. It is unfortunate that the preservation conditions in the study area have not lent themselves well to us. Elsewhere in Britain, Middle Neolithic evidence suggests that people at this time lived in a vibrant culture, were able to build great monuments and substantial structures and travel over long distances. So perhaps we have also faltered in our interpretations because we have held too narrow a view of the past. We tend to think of people in this period as less capable than later groups because it fits our popular narrative of a progression of culture that leads up to our own. Clearly, this needs to be reconsidered.

Late Neolithic– Grooved Ware – 2800-2400 cal BC

Grooved Ware was found on 10 sites in the study area. These include: six domestic sites (Hedderwick, Eweford, Overhailes, Lamb’s Nursery, Thirlings, and Cheviot Quarry), two pits (which were most probably domestic) (Milfield North pit and Old Yeavinger), two sets of pit alignments (Eweford East and Ewart I) and funerary deposits of cremated remains and artefacts at an Early Neolithic burial cairn (Eweford West); all of these date from c. 2840-2700 cal BC to 2560-2010 cal BC (2 sigma) (Appendix 13) (Millson et al. 2012). Although they do not have Grooved Ware sherds in association with them, the earliest phases of the unenclosed platform settlements at Lintshie Gutter (Lanarkshire) and Standrop Rigg (Northumberland) may also be related, in some way, to activity in the Grooved Ware period, so they will be considered with this evidence. In appendix 1, however, these are listed in the Early Bronze Age section, according to the type of pottery that was found from their later phases.

In his analysis of Neolithic pits in East Anglia, Garrow (2007) seems almost exasperated by the variability of Neolithic domesticity and land use. “It is best...to approach Neolithic

settlement as a fluid rather than uniform category, whose character needs to be investigated in an open-minded and nuanced way” (Garrow 2007: 10). Thomas (1999: 7) argues that all archaeological interpretation is based on preconceived notions, derived from the influence of previous narratives about what the past was like. As archaeologists, we then take the evidence and attempt to fit it into our boxes that define what is ‘Mesolithic’, ‘Neolithic’ or ‘Bronze Age’. In the past, if this could not be done, the evidence was thought to represent an invading culture by Culture-historians, an economic or technological change by Processualists, or new social and symbolic practices by Post-processualists. However, more and more the archaeological evidence indicates that variability was the norm in prehistory – something that is not surprising considering the evidence represents over 3000 years of adaptation and cultural change from the Mesolithic to the Iron Age. Even the material Garrow was working with covers a possible five centuries, during which people may have had many different ways of life for many reasons: influence from newcomers, a tactic to survive climatic change or the introduction of new tools or beliefs.

Sedentism, farming and animal husbandry were traditionally used to define Neolithic economy and oppose it to the Mesolithic, but the evidence can be contradictory. Greater sedentism, larger structures, manipulation of the environment and ritual activity are all found on Early Mesolithic sites, contrasting to the greater mobility and smaller structures of the Late Mesolithic (Bradley 2007: 32), and the settlement and agriculture that appear suddenly in the early fourth millennium BC (characterised by extensive field systems at sites such as Ceide Fields, Ireland) seem to disappear by the time of Impressed Ware. This has been used to argue that pastoralism became more prominent as the initial immunity of cultivated crops to cereal pests wore off (Bradley 2007: 43), but perhaps what this bigger picture really demonstrates is that the ‘Neolithic lifeway’ was much more complex over space and time.

In the Grooved Ware period, faunal and floral remains are less commonly found in the Tyne-Forth region since the soils tend to be acidic, although, charred hazelnuts, which seem almost indestructible, were found at Cheviot Quarry and Thirlings. Emmer and einkorn wheat grains have also been found dating to this period, as well as barley and bread wheat (Schulting 2008: 94). Faunal remains included domesticated cattle (which differ to the wild species already known in Britain), sheep/goat and pigs. Schulting (2008: 94) also lists a range of wild resources; however, it is important to note that the re-evaluation of the faunal material at Rudston Wold (Yorkshire) demonstrated that previous conclusions of a diet of mixed wild and domesticated animals for the Grooved Ware period were incorrect and there was actually

an exclusive use of domesticated resources in the Grooved Ware sequence, unlike with Impressed Ware (Rowley-Conwy & Owen 2011). The lack of remains in the Tyne-Forth region may conceal a similar pattern and so this must be kept in mind. In addition, it is probable that transhumance was also practiced by some people due to the climate, and so ‘sedentism’ may only have applied to some people and ‘farming’ to only part of the diet (Stevens & Fuller 2012; Schulting 2008: 97; Waddington 1996).

Settlement in the Neolithic

Late Neolithic settlement at the six sites and two pits where Grooved Ware was found is in the valleys and the features tend to consist of truncated post holes and pit bottoms. At first glance, the period can seem under-populated with little human impact on the land. At the domestic sites, such as Cheviot Quarry, Lanton Quarry, Thirlings and Eweford, structures seem ephemeral as few solid posts are discerned and refuse pits are scattered across the sites. This is a trend in other parts of Britain as well in the Late Neolithic and Bradley (2007: 44) suggests that the ephemeral nature of the remains may actually represent the internal features of larger houses that have not survived. Certainly, in the south of England larger timber constructions are often found in association with Grooved Ware, and in lowland Scotland, at sites, such as Balfarg Riding School, substantial timber structures were erected. At Skara Brae, in Orkney, houses made of stone were built in a village with inbuilt furniture and associated with early Grooved Ware (Childe 1934; Clarke 1976). Skara Brae was previously thought to be an exceptional architectural case, associated with the monumental sites nearby (Maes Howe, the Ring of Brodgar and the Stones of Stenness), but recent findings at Barnhouse show that stone-built structures of this type were common abodes for those making Grooved Ware in Orkney. This is not to suggest that the houses in the Tyne-Forth region were exactly like those at Skara Brae or in southern England, as has been put forth by Thomas (2010), but simply that there are many contemporary examples of substantial construction at this time and the evidence demonstrates that people were capable of this. It is, therefore, probable that Bradley is correct and that we are simply missing the rest of the data.

Indeed, when considering the findings from upland sites where later farming has not been as intense, possible traces of Neolithic habitation, give evidence for more substantial use of the landscape. At Standrop Rigg, the earliest radiocarbon date available came from the later phase of Platform 4 and placed its final house in the Early Bronze Age; however, Platform 4

had a succession of houses and was clearly used before this time. Similarly, at Lamb's Nursery (Dalkeith), the earliest evidence for a structure was an arc of pits that contained Grooved Ware in their fills. This was associated with refuse pits and the entire arrangement mirrored the later unenclosed Bronze Age roundhouses built over top. At Lintshie Gutter, the earliest structures were on Platform 7, which had two consecutive ring-grooves used to secure the posts and stakeholes of the wattle-and-daub walls of the house (Terry 1995). Platform 7 was undated, but was subsequently used as a midden by the inhabitants of Platforms 5 and 8. Platform 8 also had two phases of use where the primary ring-groove was replaced by a second one. Radiocarbon dates from hazel charcoal, found in a sealed context of Platform 8's first house were determined to range from 2500-2280 cal BC – in the later Grooved Ware or earlier Beaker periods (Terry 1995: 390-1). Although this date was taken from charcoal, which can cause discrepancies in the dates, the species of the charcoal was identified as hazel, a short-living species that is usually more reliable. If this is accurate, then it suggests that Platform 7, which is stratigraphically older, and Platform 8's first phase were inhabited earlier.

When the unenclosed platform settlements were first excavated in the Tyne-Forth region it was thought that they represented a shift in settlement patterns that began with the Early Bronze Age (Jobey 1968; Jobey 1978-80; Jobey 1983; Jobey & Jobey 1987). This was because their features contrasted so greatly with the Neolithic remains in the valleys and the radiocarbon dating technology required such large amounts of material that the earliest remains at these sites could not be accounted for. In addition, constraints on the shape and size of the platforms, which had been carved into the hills as terraces, made it so that the later houses had to be constructed on top the earlier ones and thus, by the third or fourth house, most of the first had been destroyed. However, the more recent finds at the unenclosed platform settlements at Lamb's Nursery and Murton High Crag, coupled with the re-evaluation of Standrop Rigg and Lintshie Gutter, indicates that habitation in the hills might have had a much earlier inception. So not unlike settlement today, the people who made Grooved Ware in the Tyne-Forth region may have lived in several types of houses in different locations, from ephemeral tents to post-built structures, but many others may have lived in substantial roundhouses made of wattle-and-daub as well. Findings of burnt daub at Eweford West have confirmed that construction of this type existed in the lowlands. Thus, Bradley's inference is probably correct that the scattered pits and arrangements of light post-and stake-holes at valley sites, which are so heavily truncated and eroded, were probably the

internal supports for larger structures. In addition, the presence of these findings at both upland and lowland sites demonstrates that the population was great enough to use the entire landscape, rather than just the valleys for habitation and hills for grazing (Waddington 1996).

The Monumental Evidence of Grooved Ware

It is in this realisation that the monumental evidence of the Grooved Ware sequence must be considered. Although several sites that were used in the Later Neolithic, such as Blackshouse Burn and Eweford West, had their inception in the early parts of the Neolithic, it does appear that with Grooved Ware comes a greater concept of demarcating space and controlling movement within the landscape. The construction of monuments that are visible archaeologically is traditionally believed to be a part of the transition to a Neolithic ideology that is associated with the concept of time (Bradley 1993: 6). Since farming requires planning and outcomes are directly related to past action, ancestry and tradition would have seemed more important to farmers than it was to hunter-gatherers who lived hand-to-mouth. It is now known that, such as the adoption of domesticates, the inception of the idea of monuments stems far back into prehistory to a concept of place. The first people who grew wheat did not live in a meaningless world, a clean slate, but instead, they knew their landscape and the important places within it (Bradley 1993: 6-8). By constructing monuments on places that already held significance, such as at the spring at Blackshouse Burn, the people were simply enhancing these places. McFayden (2008: 124) suggests considering places as points along a route for a (semi) mobile people. Even as people were more sedentary in their settlement patterns, the routes would still have existed in their concept of space as special markers on a mental map. Indeed, the placement of henges tends to be along obvious routes, such as valleys leading into uplands and along rivers (Bradley 2007: 132). The eight henges set in alignment running north to south in the Milfield Basin (Figure 4.1) are a key example of this.

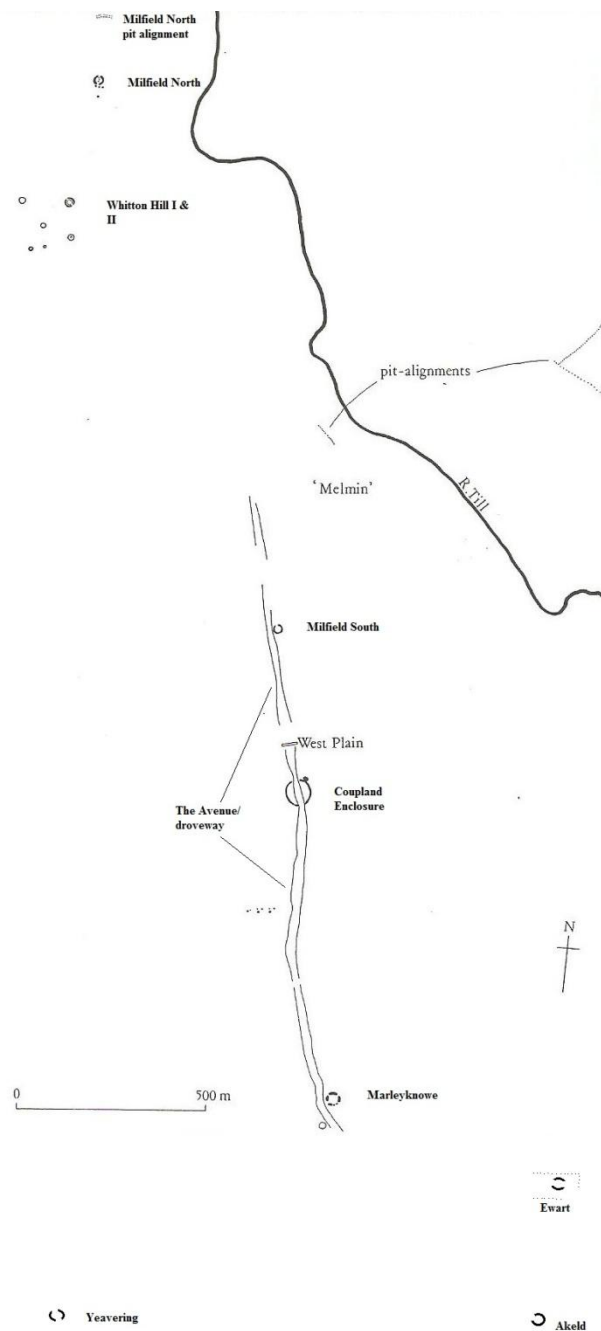


Figure 4.1: Map of the monuments in the Milfield Basin, Northumberland (from Harding 1981).

Whether intentional or not, the construction of these features on the landscape will have also served to control people's movement within it (Thomas 1999: 50-7). "...monuments formalize a pattern of movement among those who are allowed inside them, and their features are as probable to conceal certain elements as they are to reveal them" (Bradley 1993: 48). It is during the Later Neolithic period that the Meldon Bridge site was enhanced and enlarged, making it an even more commanding presence on the Peeblesshire landscape. The timber palisade that surrounds the site was built larger in the Grooved Ware phase (c.

2500 cal BC onwards) (Speak & Burgess 1999: 20). It is to this place that a double row of timber uprights further controlled access to and from the site in the form of an avenue (Speak & Burgess 1999: 24). The double pit alignment at Milfield North would have held a substantial fence, or timber wall, that would have formed a boundary to the north of the Milfield North Henge (Figure 4.2), controlling access to it and ensuring the approach always went towards its northern entrance (Harding 1981: 116). At Ewart I and II, timber uprights were placed in pits with Grooved Ware sherds in three rows that enclosed the Ewart henge on three sides (Figure 4.3) (Miket 1981: 138). These walls not only would emphasize the significance of the places they enclosed, but they would also have controlled peoples' experience: how they moved from one monument to the next, how they approached each one, what would have been visible from where and what people would have been able to hear (Bradley 1993: 48-50; 1998: 116; Thomas 1999: 57).



Figure 4.2: Milfield North henge and pit alignment (from Harding 1981).

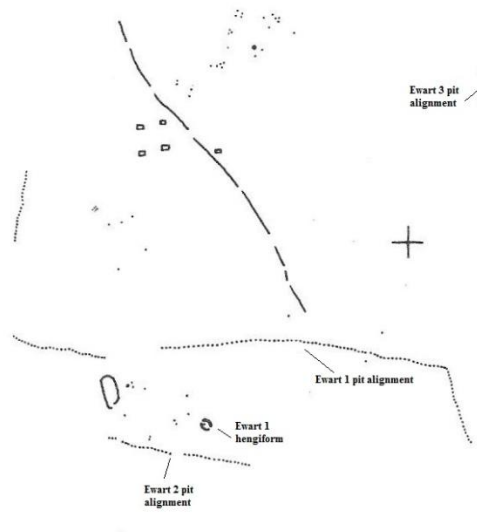


Figure 6.3: Ewart henge with surrounding pit alignments (from Miket 1981: 138).

Waddington (1996) implements this theoretical framework in the consideration of the use of the eight henges and the avenue/droveway in the Milfield Basin. For the practical use of transhumance in the Early Neolithic, he suggests that the avenue served to move cattle from the uplands to the basin and into the largest henge, the Coupland Enclosure, where they could be redistributed amongst the people living there. He describes how the avenue/droveway might also have controlled how people moved through the land in the Later Neolithic as they progressed from henge to henge, moving north to

south. His conclusions utilize the entire landscape and make good use of the rock art in the surrounding area and the orientation of the monuments in relation to one another and to important natural features; and the phosphate and compression data on the avenue/droveway, compared to places adjacent, support its use by large animals. But there are flaws in this scenario. Waddington (1996) claims that the droveway is later than the Coupland Enclosure (which begins in the Early Neolithic) and is related to it because the droveway bends within it to exit by the other entrance, but there is no clear evidence that the droveway itself was built or used in the Neolithic. The Milfield Basin had an intensive occupation during the Anglo-Saxon period when King Edwin moved his palace to the interior of Northumberland to gain support from native groups (Hope-Taylor 1970). Many of the henges were re-used at this time for Anglo-Saxon cremation burials. It is just as possible that Waddington's phenomenological account of the henges and the construction of the droveway for the purpose of movement between them could be much later in date, at a time when a king was trying to legitimise his claim on the land by tying himself to the past (Bradley 1993: 115).

Waddington's major shortcoming is that he considers the landscape following Tilley's (1994) idea of phenomenology. This uses modern experience of what remains on the land to understand what past experience would have been like, but does not take into account that the monuments will have been altered with use and, within a complex like the Milfield Basin, they will have changed differentially. Their form today is the end-product of generations of amendments and each monument is slightly different. What is on the landscape today will never allow us to see through the eyes of the ancients because it did not exist then in the way it does now and any description will be quintessentially modern (McFayden 2008: 126-7). Landscapes are not palimpsests where each period is layered upon the last. Instead, they are embodied with the remains of past action influencing the present and 'altering the earth' for the future (Bradley 1993; 1998; 2007; Jones 2007; 2008; McFayden 2008; Thomas 1999).

It is in a similar way that we tend to place meaning onto archaeological features that reflect the preconceived notion that we have about that time period. So as a consequence, the Late Neolithic is envisioned as a time of greater ritual and spiritual activity, when people progress around the landscape from monument to monument to partake in religious activities that reinforce the need to construct and enhance monuments. However, it is possible that these boundaries, such as timber palisades and walls, may have had other purposes. In some places, it is probable that the pit alignments were dug to hold timber fences or walls for defensive purposes. Meldon Bridge was built on a promontory that overlooks an important pass into the

Tweed Valley and the best route from the Firth of Forth to the Irish Sea. Whoever controlled Meldon Bridge would have controlled movement across the country and access to a huge territory and any goods moving through this area. They would have been wealthy and powerful. Although there is no clear evidence of violence at the site, its re-enforcements in the form of a palisade and a 27 m long, narrow entrance that would have channelled people in and out suggests that the boundaries were made to secure the site. At Eweford East, two alignments of post pits enclose an area with pits and post-holes and a possible structure. Radiocarbon dates and the pit fills (which contain burnt daub) give evidence that various sections of the alignment were replaced over 600 years because they had been burnt down. Over these centuries the alignments were also extended outwards and re-enforced so that, by the end of the Grooved Ware period, they enclosed an area of over 100 m long. This is not to say that all timber upright rows were constructed for defensive purposes, but to suggest the probability that, as the rest of the Late Neolithic period, the structures and features we see archaeologically may have had various uses in different contexts because human activity was similarly varied. A timber alignment may have served to control access to significant places, demarcate areas for specific use (such as farm fields) or to form a secure boundary.

What can be inferred from the evidence found on Grooved Ware sites in the Tyne-Forth region is that people in this period had a much more substantial existence than for which they have been credited. Although some structures may appear slight, their existence and their command of the landscape do not appear to have been so. It is our interpretation and the lack of evidence that has led us to believe that the Late Neolithic adaptation was starkly contrasting to that of the Early Bronze Age and it is these prejudices that have caused us to overlook the more substantial remains.

Late Neolithic/Early Bronze Age – Beaker – 2400-1800 cal BC

The period in which Beakers were made is called the Chalcolithic, or Copper Age, by some (Sheridan 2012; Needham 2012; Shepherd 2012) since it represents a short period of a few centuries (2400-2150 cal BC) when copper artefacts were used and bronze was not; however, the presence and impact of a true Chalcolithic in the sense it is known elsewhere (such as in mainland Europe or the Near East) is questioned by others (Roberts & Frieman 2012; Bray 2012; Vander Linden 2012; Bartelheim & Krauß 2012; Burrow 2012; Cleal & Pollard 2012). It is also contested by many since the use of this term tends to favour changes in only one

type of material when the changes identified in this period and the preceeding centuries is much more varied. This author is cautious about using this term until more information is available since it could cause the period to appear more unique than it actually was and the adoption of Beakers a more abrupt change than they may have actually represented. Beaker pottery is found on 87 sites in the study area (see Appendix 14 for list of radiocarbon dates). Of these, only three (Hedderwick, Archerfield, and North Berwick Law, with a possible two other finds at domestic sites at Cheviot Quarry and Lanton Quarry in the Milfield Basin, Northumberland) are domestic and all of these sites are dominated by Neolithic and other contemporary vessels. The remaining 82 sites comprise burials in cists and cairns. Indeed, the Late Neolithic lacks burial sites, whilst the Early Bronze Age seems to be dominated by them and this appears to begin with Beaker burials. This is partially due to the research interests of archaeologists, particularly Antiquarians, who dug mounds seeking past treasures, which resulted in a rich burial database, compared to other forms of sites, but it may also be caused by the imbalance in preservation that favours the contexts of sealed cists over open pits. Although mounds are known in neighbouring regions from the Neolithic (in particular, Yorkshire), the majority of the cairns in the Tyne-Forth area are founded by an initial central Beaker burial. In the case of Drumelzier (Peeblesshire) the primary burial includes pottery that seems to bear mixed characteristics than truly Beaker, and was described as “Neolithic or Overlap pottery” (Craw 1931: 367). Most of these are inhumations of an individual with grave goods typical of Beaker burials known elsewhere: copper awls, jet buttons, beads, necklaces, shale, red ochre, flint knives, flakes, barbed-and-tanged arrowheads, bronze blades and scrapers. At Doons Law (Berwickshire) a floral tribute was recognized through pollen analysis (Clarke & Hamilton 1999: 199); and at West Linton (Peeblesshire) meadowsweet was traced around the head of the inhumed body (Hunter 2000: 122). In two cases, graves were re-opened for a second individual after some time; such as at West Pinkerton (East Lothian) and at Harehope Cairn (Peeblesshire), where three Beakers of separate time periods were found in the same cist (Jobey 1980: 101).

Traditionally, this move to individual burial under a mound was seen as a change in cultural values towards a focus on local élite leaders and their lineage (Jones 2008: 179). Bradley (2007: 158) notes that there are simply not enough bodies under mounds to account for the general population and in many cases, the mounds were re-opened and subsequent burials were placed, sometimes in the same cist. This suggests memory of who was buried there, their relationship to the subsequent deceased, and an act of joining them together (Bradley

2007: 162); it creates a narrative of connection and lineage, emphasizing a particular descent (Thomas 1999: 158). However, placing too much emphasis on this can lead to the Neolithic and Bronze Age appearing as binary opposites. It is important to remember that there is much variation in Neolithic burial in Britain (Gibson 2007), including multiple individual burials under mounds, and in the study area at Eweford West (East Lothian), an Early Neolithic long mound continued in use with the deposit of cremated remains in pits with Beakers, just as the earlier burials at the same location that were associated with Carinated Bowl (MacGregor & Stuart 2008: 84; MacGregor 2008; Lelong & MacGregor 2008). Grooved Ware was also found in hollows in association with this long mound. It is of particular interest as well that the Beakers used in these deposits varied in form, unlike the uniform type found at burial sites in cists and under mounds. Clearly, the introduction of Beakers to the Tyne-Forth region is closely tied to specific funerary practices and this may be the reason for the imbalance discussed above. It is clear that the significance of Beakers cannot be understood if it is studied in isolation.

The Beaker Shadow

Since V. G. Childe (1937) proposed that Beakers arrived in Britain with invading forces from continental Europe, the nature of this invasion has been revisited and revised. With the changing philosophies of whether Beakers were adopted by a force of people, or a force of ideology, has been debated. This has left areas with fewer ceramic remains, such as the Tyne-Forth region, open to being interpreted based on the remains found in other parts of the country. It is increasingly clear, however, that the introduction of Beakers was not as dramatic as Childe originally envisaged, nor was it as simple or as consistent across the continent.

It is known that Beakers were first made in mainland Europe and the earliest styles in the Tyne-Forth region indicate that they were derived from Holland (Clarke 1976; Lanting & van der Waals 1974; Needham 2005). Indeed, it is interesting to note that the earliest Beaker sites are concentrated near the coast in East Lothian. But based on the evidence, if Beakers represent the movement of people, then it cannot have been a populous migration. Bradley (2007) believes that it is most probable that only those Beakers with direct stylistic links to the Continent represent the movement of people, whilst the remainder are those made by local people. Indeed, the data of the Tyne-Forth region supports cultural continuation and

progression over time. The domestic sites show continued and repeated use from the Early Neolithic to the Iron Age and there are no exclusive Beaker settlements. Even though the first burials and ‘closing’ of henges are associated with Beaker pottery, each of the Neolithic sites where this occurs also has multiple phases of construction and changes before and after this. For example, it is in the middle phases that this occurs at Cairnpapple (Barclay 1999), and with the final construction of the perimeter at Blackshouse Burn that Beaker sherds were lost on the surface (certainly not the beginning of that site’s use) (Lelong & Pollard 1998). At Milfield North henge, Beaker sherds are not found, but the site was later enhanced with a bank after it was used for a Food Vessel burial (Harding 1981). At Whitton Hill, Early Bronze Age cremations were found in the henge’s interior (Miket 1985), and at Yeavinger henge a Beaker-style burial was placed near the henge’s entrance in the middle of its use-life, and then continued to be maintained until the Anglo-Saxon period (Harding 1978). Consequently, there seems to have been only cultural continuation and evolution at the domestic and ritual sites that involved the incorporation of new ideas from various locations over time.

During the Grooved Ware period, a coarseware component with related characteristics, not fully conforming to national trends, is recognised as a regional interpretation of the greater tradition at sites in the Tyne-Forth region and elsewhere in Fife and Yorkshire (MacSween 1999 and Manby 1999). During the time of Food Vessels and later urns, Burgess’ (1995: 145) first phase of domestic pottery found at upland sites represents local creativity. Whipped-cord, combed and dotted lines and twisted cord are prevalent on sherds found in contexts dating from 2100 – 1700 cal BC. Although the style was similar to Food Vessels, it was not the same as the funerary ware. During the Beaker phase, in between Grooved Ware and Food Vessel, and called the Chalcolithic by some (see Allen et al. 2012), this trend continues and vessels found at domestic and ritual sites (and a few of the earlier burials) bear characteristics that do not fully conform to the national Beaker trends. They may have not been categorised separately by those who made them, but what is important is that they reflect the personality of the individuals and groups of this region and their interpretation of the national traditions.

What seems to be most important is the understanding of the place of these errant examples. It is known elsewhere in Britain that, although Impressed Ware, Grooved Ware and Beakers all overlap at their extreme ends chronologically, each is used in different contexts (Thomas 1999: 120). In Ireland, Beakers tend to be found in domestic contexts and at monuments and they seem to take over from Grooved Ware (people do not seem to have distinguished a

difference between the two styles) (Bradley 2007: 147). In Great Britain, Beakers are used in funerary contexts and rarely on domestic sites, which is certainly the case in the Tyne-Forth region. It seems that Beakers, for the most part, were used for a specific purpose: burial, whilst other pottery, meant for the other activities in which Impressed Ware and Grooved Ware had been previously used did not need to conform as closely. So Beakers are not usually found at henges, except in burial contexts, whilst locally-made pottery is found. This does not mean two separate cultures, or a sudden change in ideology, but simply that the people in the Tyne-Forth region started putting Beakers in their burials and buried their dead in a similar way to other regions where people made Beakers. It is whether these practices (pots and burial ritual) were introduced together or if various elements of them slowly filtered in that is up for debate. In the meantime, pottery continued to be a venue for experimentation and creativity elsewhere. The very characteristics of the regional vessels that bear similarities to Impressed Ware, Grooved Ware and Beakers and anticipate Food Vessels enforces this. It is possible that it was because Beakers were meant for use in burial that the range of Beaker vessel forms is so limited compared to the variation of the tradition seen on the Continent. Case (1995) argues that for Britain, there is a consistent choice of medium-sized Beakers selected (or made) for burial. This was done for these new burial practices whilst less formal style was used on domestic and ritual sites that have a longer tradition of use within Britain proper.

In the past, vessels that did not conform to the national trend or had mixed characteristics were called ‘Overlap pottery’ or were simply included in the style they mostly fit (Gibson 2002b). The recognition of them here, as separate from the national traditions, is done in the attempt to loosen the constraints of the typology in which we have attempted to fit them so that they can be considered as a reflection of the individuality of the region.

There are 15 sites in the study area where pottery that is contemporary to Beaker, but is not formally of that tradition, has been found. Eight of these are domestic (Archerfield, Hedderwick, North Berwick Law, Whitton Park, Cheviot Quarry, Thirlings, Lookout Plantation and Ross Links), whilst three are funerary (Pencraig Wood, Chatton Sandyford, and the Hirst), three more are henges (Whitton Hill, Milfield North and Yeavering) and one site is a pit alignment (Milfield North). A further two sites that extend from the Late Neolithic to the Early Bronze Age and encompass this period are included even though they did not yield any pottery. These are Cairnpapple (West Lothian) and Blackhouse Burn

(Lanarkshire). Both the second phase at Cairnpapple, when the henge was dug, and the first phase at Blackhouse Burn, when the enclosure was built, fit into this phase.

The domestic sites remain as spreads of postholes and pits, but there are also three sites (North Berwick Law, Archerfield and Hedderwick, all in East Lothian) that have been preserved as mixed deposits that demonstrate occupation from the Neolithic onwards (Cree 1908; Curle 1908; Callander 1929). The earliest phases at unenclosed platform settlements begin in the Grooved Ware phase, but these settlements continue to grow and new ones are built. For example, at Traprain Law (East Lothian) a mixed deposit of cultural material from the earliest Beakers to the Early Bronze Age was found (Curle 1921).

Early Bronze Age -- Food Vessels-- 2200- 1700 cal BC

Food Vessels are found on 76 sites in the study area and half of these are at sites that began with either Beaker burials or Food Vessels and continued in use with urn burials (see Appendix 16 for radiocarbon dates). Of the other sites, only six were found in isolation of other burials. The Early Bronze Age domestic sites, particularly the unenclosed platform settlements largely produce radiocarbon dates from the time of Food Vessels onwards and at the coastal domestic site of Hedderwick (East Lothian) the mixture of material stretches through to the Iron Age (Callander 1929). At Ingram Hill (Northumberland), a site known for its Iron Age hillfort, the earliest levels comprised a spread of Early Bronze Age domestic material (Hogg 1956: 155). Presumably, people continued to live in the lowland areas as well, although the remains of this are poorly preserved. The argument discussed in the Grooved Ware section for increasing population and the need for farmland causing people to move further into the uplands with the Early Bronze Age was first put forth by Jobey in the 1960s (Jobey 1968; Jobey 1980; Jobey 1983; Jobey & Jobey 1987). Indeed, there is much more evidence for land divisions to create farm fields, and cairns produced by the rubble of cleared land, particularly at domestic sites, such as Green Knowe (Peeblesshire) (Jobey 1980), Chatton Sandyford (Northumberland) (Jobey 1968), and High Knowes (Northumberland) (Jobey & Tait 1966). However, it seems that this evidence is produced by a combination of better preservation and a more intense land-use in the same locations since platforms were re-used. Querns, wheat and barley grains become much more prevalent.

Although most of these sites produce quantities of pottery, what is new is that the sherds at domestic sites can only be defined as ‘Early Bronze Age’ – something that continues with the Middle to Late Bronze Age general term, ‘Flat-rimmed ware’, which is not described in any detail. Burgess’ (1995) analysis of the domestic pottery of the region demonstrates that it is more variable in form and style than contemporary funerary vessels and it is perhaps for this reason, just as with earlier domestic pottery, that it is undefined and simply identified with the blanket term ‘Flat-Rimmed Ware’. Some urn sherds have been found at domestic sites, but generally they seem to have been made for deposition with the dead. Burgess (1995) notes that there is a progression for domestic pottery style in the Early Bronze Age. The pottery on domestic sites implements similar decorative motifs as the urns, but it is distinct in form. In no cases were Food Vessels, as we know them from burials, found on domestic sites (Burgess 1995: 150). Food Vessels thus represent a continuation of the tradition of following national funerary practices within a regional way of life that involved the use of locally-designed domestic pottery.

The earliest Food Vessels are found associated with inhumation burials, such as Beakers, but as time goes on, they also accompany, and in many cases, hold, the cremated remains of one or more individuals. The sites are usually in raised areas of land that have good views of the surrounding landscape or coast. This has been argued to demonstrate dominance over trade routes or land (Cummings 2002), but it could equally be an indication of a sense of belonging or ‘home’. As with the Beaker data, it has been argued that the number of people buried in these mounds cannot have represented the past population; however, the prevalence of flat graves found in recent years during salvage excavations and the research bias towards mounds in the past (where the majority of the material comes from), as well as the poor preservation known in the area causing many cists to now be empty, may suggest that this was a common burial practice for the general populus.

Early/Middle Bronze Age -- Collared/Cordoned/Urn – 1900-1500 cal BC

The Early/Middle Bronze Age remains found in the study area comprise 15 sites that yielded Vase Urns, 69 with Collared Urns, and 8 with Cordoned and Bucket Urns (see Appendix 17 for associated radiocarbon dates). At 11 of these sites, Accessory Vessels were found associated with the urns. All of these vessels were found in funerary contexts; however, the settlement sites from previous periods continue to be occupied at this time and, such as the

sites contemporary to Food Vessels, domestic sites that were inhabited when these burials were placed, demonstrate the continuing use of a separate range of domestic pottery (Burgess 1995). As with the urns, the domestic pottery was decorated with a focus on the rim and collar and the motifs used consisted of finger grooves or incisions. Urns were not found at these domestic sites nor examples of the domestic pottery with cremations (Burgess 1995: 145, 150).

Almost all of the urn traditions follow the similar practice of placing the urn in an inverted position over human cremated remains and presumably, some sort of cloth, leather, or other perishable seal held the contents inside (it is possible that this could be the functional reason for the ‘overhanging collar’ or external bevels on the pots). The cremated remains were usually of one or two people and there was no discrimination for one sex or age group. Flint knives and flakes, sometimes unburnt, were common grave goods and in two rare cases at Outerston Hill (Midlothian) (Stevenson 1939) and Gourlaw (Midlothian) (Coles 1904), bone pins were found, which may have been used to close the bag that held the remains. Unlike previous burials, the use of cists is not as systematic with urns and contexts range from full cists to stone settings, to burial in a pit with a stone slab on top, or a simple burial in a pit.

Conclusion

The Tyne-Forth region poses particularly difficult challenges in understanding the Neolithic and Bronze Ages. This is largely caused by the uneven, and sometimes very poor, preservation due to acidic soils and later human activity, such as ploughing. Many parts of Northumberland and the Scottish Borders have acidic soils, making the preservation of uncremated bone and other organic materials very poor. It is not uncommon to find burial cists that are empty of human remains, yet still contain pots (for example, at Yeavinger Henge a body stain indicated where the inhumation lay next to a Beaker (Harding 1981: 122)). This makes understanding trends in the region more difficult since they are so uneven. Part of the reason for this problem is because Neolithic and Bronze Age people lived on the same types of good farmland we favour today and most of the domestic sites we find are truncated from deep ploughing. Even today, burials that were dug well below the ground level are found most often when the cist capstone is hit by the plough. So domestic sites that were originally shallower will have largely been destroyed.

The trends in research interests have also created problems in understanding the prehistory of the study area as researchers in the past favoured domestic and monumental Neolithic sites and funerary Bronze Age sites. It is this fixation that has resulted in a dataset that confuses the situation and makes it appear imbalanced. Thus, we do not fully understand how or if the treatment of the dead changed from the Neolithic to the Early Bronze Age. The lack of burials from the previous period and the dominance of them in the latter, demonstrate this, which has created an interpretive problem in and of itself. The imbalanced record favours Neolithic settlement and Bronze Age burial over Neolithic burial and Bronze Age settlement. What this has then caused is a situation where the two periods are incomparable and this has led the two to appear more different than they actually were.

To alleviate this problem, many researchers have, in the past, tried to interpret the sparse data by comparing it to similar sites in better preserved regions such as Orkney and Wessex. However, we know now that it is improbable that the culture of this region was exactly the same as those from such far-away places. In the Tyne-Forth region, there were no timber longhouses as in central Scotland, or large stone circles as in Cumbria; there were no recumbent stone circles as in northeast Scotland, or double-ditched henges as in Yorkshire. The monuments that were constructed in this region reflects a local interpretation of these more widespread traditions but cannot be directly compared because they were made by different people. However, prejudices of what ‘should have happened’ at certain types of sites and previous conclusions of what did still played on in many interpretations by some of our best archaeologists until recently and it became a problem of simply ‘finding the evidence to prove it’ (Barclay 1999; Harding 1981; Piggott 1947; Waddington 1996). The mistake of confusing *Grubenhauser* for Neolithic longhouses in the Milfield Basin, such as those found in Central Europe and Wessex, is an example. It is really in the last two decades that this problem has become the focus of attention, probably since so much new data has been uncovered with the rise of developer-funded archaeology that there is actually something to compare and differences have begun to stand out, but it remains difficult to abandon these interpretive foundations.

Undeniably, the imbalance of the data was initially caused by the Antiquarian work done in the 19th century. Although several of the Antiquarians, such as Canon Greenwell and Joseph Anderson in Northumberland and the Scottish Borders, attempted to record the details of the sites they dug (something often lost elsewhere), it is their active interest in funerary monuments that has caused the ceramic assemblages in question to so strongly favour death

in the Bronze Age. Of the 222 transitional and Early Bronze Age sites in the data set, 200 of these are burial contexts and 105 of them were dug before 1900. By contrast, of all of the Early Bronze Age domestic sites, of which there are only 11, more than half were excavated from the 1960s onward (most being uncovered in the 1980s).

The change in direction to consider Bronze Age settlement in the modern work has not been without its imbalance either. Particularly since the implementation of PPG16 (Planning Policy Guidance 16), now replaced by PPS 5 (Planning Policy Statement 5), which made it law that any archaeological remains found during commercial development must be assessed, excavated and preserved by professional archaeologists, most of the work has been done by developer-funded archaeological units. The strengths of this has been that excavations are usually done on a larger scale and there is funding to do extra post-excavation analysis, including more radiocarbon dates, residue analysis on the pottery, and archaeobotanical analysis of the site. Nevertheless, the disadvantage is that excavation only occurs where development is to take place. Consequently, there is now a concentration of sites in the archaeological database along the A1 motorway and at the quarries in the Milfield Basin and in Peeblesshire – something that does not reflect past settlement.

In addition, there is a great problem for research in the Tyne-Forth region with the lack of secure radiocarbon dates. In the entire area, there are only 27 sites where dates have been taken (Passmore & Waddington 2009). Of these, 14 were calculated before the 1980s when calibration corrections were developed to make the dates more accurate and to reduce their margins of error. Several of these were recalibrated, but their margins of error remained greater than a century because the initial dates had been determined mostly from unidentified bulk samples. And although several sites have since been redated (Meldon Bridge and Thirlings being examples), and a major redating scheme has just been completed by Archaeological Research Services Ltd. (Passmore & Waddington 2009) and National Museums Scotland (Sheridan 2003; 2004; 2007), the region still suffers from a lack of a secure chronology (Sheridan 2007). As a consequence, the interpretation of the sites is very difficult since those conclusions must rely on trends from the (very few) sites in the region and there is a danger of creating circular arguments. This is part of the reason why the Neolithic and Bronze Age has been misunderstood for so long. It is through more thorough radiocarbon dating of sites that it will become much clearer how platform settlements began, how the use of henges changed over time and over how long a period these changes took place.

The remains found in the Tyne-Forth region can be frustrating as they allow a glimpse of unique and vivid prehistoric cultures and yet, they are some of the sparsest in the country. It is with the latest scientific techniques and the excavation of more sites, especially in the last 40 years that a better understanding of the region and how it changed over time has come to light. Thus we now stand in an exciting place. There is now better information to consider the transitions from hunting and gathering to farming, from the Neolithic to the Bronze Age and beyond, and more importantly, the time in between when culture persisted and built up to invention. There is little doubt that in 40 more years, our 243 sites will have multiplied to the extent that cultural contacts will be visible and the past will be understood in much greater detail.

CHAPTER 5: RESULTS

Introduction

This chapter, along with Tables 5.1-5.10 (DVDs), presents the resulting data from the study set out in Chapter 1. A series of experiments on replica pots, made from material found in the Tyne-Forth region, was first conducted and from this, criteria were selected for the provenance study of all available ceramics from the Tyne-Forth region that date to the Late Neolithic and Early Bronze Age. This evaluation was completed at the museums in which the vessels are currently held. These data proved too detailed and the documents too large to place within this chapter, so they are summarised in the appendices and in tables on the accompanying DVDs. An analysis of the trends in these data was then completed. From this, an understanding of the various lifeways and settlement distribution was considered, which is accounted in full in the following chapters (6 and 7).

The Role of Experimental Archaeology in Ceramic Studies

In the study of pottery, experimentation is essential because it allows us to better understand the manufacturing process of the pots. Hart & Brumbach (2009: 367) argue that ceramic studies, although not immune to the upheaval of the 1970s, 1980s and 1990s, were much less affected than other areas of archaeology. This is because, as material objects that undeniably held a functional role of some sort, the practical use of pots could not be fully ignored. But neither could the symbolic qualities of the stylistically-diverse decoration on those pots that had the potential to unlock past social and individual identity be overlooked. So studies had to be more balanced. Owing to the overwhelming variability of styles and possible meanings of ceramics, it is clear that they will have held some sort of significance, even if it was simply an aesthetic one. As a result, many projects have attempted to either balance the ideological and functional aspects, or they have to take a more Culture-historical approach, focussing on typology. The problem is that the variability is infinite: there are so many types of clay, inclusions, methods of pot formation, firing, and decoration, and these can be combined in many different ways (Rice 1987: 276). Moreover, although one type of inclusion or one method of manufacture may be more effective, for various reasons, people do not always act the way they 'should'. It then becomes a question of how the potters *could* have made their

pot versus how they *chose* to make it. To be able to reconcile this divergence, we need to understand the options that were available to a particular potter in a specific instance, and then examine how these changed over time to appreciate why that potter was making the decisions he/she was. This is where experimentation is useful.

A good example is Christopher Pierce's (2005) study of Puebloan cooking pots in the southwest USA. During the seventh to the eleventh centuries AD, Puebloan potters began to decorate their plain cooking vessels with a corrugated texture on their external surfaces. To better understand why this change occurred, Pierce created replicas of both plain and corrugated vessels, measuring how long it took to make each, and how they performed in cooking. He found that, although the corrugated pots took longer to make, decoration on the neck allowed for a better grip when moving the vessel; corrugation on the body created better heat transfer; and those with corrugation on the base had a much longer use-life than the plain vessels.

Harriet Hammersmith's (2010) work on Beaker pottery in the Scottish Borders has challenged Van der Leeuw's (1976) theory that All-Over-Cord (AOC) Beakers were made by pressing clay into a cord mould. She found that in contrast to Van der Leeuw's claim that this would create the even cord impressions, the manipulation of the wet clay against the cords caused the decoration to be distorted, and the shape was much more difficult to achieve than when she built the Beakers by hand and decorated them afterwards.

These, and other examples of this type of work, such as, Hoard & O'Brien's (1995) study of limestone inclusions in Late Woodlands ceramics; Bronitsky & Hamer's (1986) consideration of the performance of ground and burnt tempers; and Dineley & Dineley's (2000) production of ale, based on residues found in Scottish ceramics, demonstrate just how much can be achieved with this method. Although these studies do not give conclusive evidence of what each pot was used for, they do allow the possibilities to be narrowed down so that the strongest hypotheses can be identified and the weaker ones abandoned. It is for this reason that followers of the *chaîne opératoire* philosophy use methods that include experimentation based on what is seen in the archaeological material and in ethnographic studies (Boëda 1991).

Experimentation and its Purpose for this Research

The experimental component of this research was designed as the first stage in the larger project to create a foundational knowledge about pottery and ceramic technology. It was conducted for two specific reasons: to better understand the medium (pottery) and to target questions about the use of sealants and the taphonomy of the sherds. I was approaching the material as someone who is not a professional potter and so I needed to learn more about the process of hand-building and open-firing. In addition to this (and regardless of my potting skills), knowledge of the properties of the materials specifically used in this region, and the performance ability and the use-life of these pots during the Neolithic and Bronze Age is currently lacking in the local literature, the last experiment having been published in 1981 (Gibson 1981). The experiments thus targeted increasingly complex questions in two categories: I) methods of manufacture, and II) the ability of the pot to be used and to survive.

I) Methods of Manufacture

The first group of experiments consisted of collecting the materials needed to make the pots, gaining the specialised instruction necessary to make them, and working to a skill level where pots could be produced in a standardised way. The main purpose of this phase was to consider a possible chaîne opératoire for the local ceramics, and to answer the following questions:

- 1) How easy is it to make a prehistoric pot?
- 2) How long does it take an amateur to learn how to make a pot and start making them according to a standard set of criteria?
- 3) How much time and effort do these pots cost?

II) Use and Survival

In the second phase of experimentation, the pots were used to cook and store food and water to answer specific questions about residues that have been found on pots of these types. The

extent to which taphonomy is responsible for the small size and high level of abrasion of the archaeological sherds was also questioned:

- 4) How long will a hand-built, open-fired pot last when used for cooking over a fire?
- 5) Where beeswax is found as a residue, is this an indicator of a sealant to make the pot more effective for cooking? Or, does this suggest a sealant that was used to make the pot more efficient for the storage of food or liquids?
- 6) How quickly do pots of this quality deteriorate when exposed to the elements, and when buried?

Table 5.1: Summary of Experiments and Results

Experiment	Question	Method	Result
Methods of Manufacture			
	1.How easy is potting? 2.How long does it take to learn? 3.What is the time cost of potting?	<ul style="list-style-type: none"> ● 72 vessels made ● learned from professional potter ●dried for several weeks; fired in bonfire 	To learn to make hand-built vessels, daily practice took only a couple weeks to gain enough skill to make a basic form. Once this was achieved, small pots could be produced in 10-15 minutes.
Use and Survival			
	4.How long does a pot last when cooking over a fire.	<ul style="list-style-type: none"> ●boiled three small pieces of meat in water by placing the pot in hot coals near the fire. ●preheated the vessel and allowed to cool in warm place to avoid cracking 	There was a large breakage rate, but once a vessel was found that did not break within the first few boilings, it tended to last thereafter. This was termed a 'good' pot.

	5. Was beeswax used as a sealant on vessel walls for cooking or storage?	<ul style="list-style-type: none"> ● pot sealed with heated beeswax, used to boil water. ● second sealed pot held cold water for 24 hours. 	Three trials of boiling water in a pot with a beeswax seal on the surface resulted in the destruction of that pot. The vessel used to hold cold water maintained the water level for the 24 hours.
	6. How quickly do pots deteriorate when exposed to the elements?	<ul style="list-style-type: none"> ● a pot was buried and another left on the surface for 11 months in Wooler. ● repeated with two other pots in Ontario, Canada 	After a year, in both places, the buried pots had been reduced to clay, except for some portions of the vessel walls that had fired better than other parts. The exposed pots on the surface were reduced to fired sherds.

Methods and Results (Table 5.1)

I) Methods of Manufacture

Questions 1-3

Over the course of several months, 72 small pots, resembling tiny Collared Urns were constructed under the instruction and guidance of professional potter, Mr. Graham Taylor (Figures 5.1- 5.4). The clay had been obtained from a source just south of Wooler, Northumberland, and exposed in Milfield for 18 months before use. The pots were fired in a bonfire at Segedunum Roman Fort in Newcastle upon Tyne (Figure 5.5). This was done by heating them near the fire and moving them closer and closer over the course of several hours until they were submerged in the flames for about 40 minutes. This gradual heating reduced the breakage rate during firing. A final flash of fire was made using dried evergreen branches,

and then the pots were left to cool as the fire died down. The pots were then used in cooking



Figures 5.1-5.4: Building a vessel

experiments over a small fire in the reconstructed Thirlings house at Bede's World, Jarrow.

The small, simple prehistoric pots were not too difficult to construct. The process was made easier by being given a certain routine to make them, and being taught and corrected by Mr. Taylor, and I found that I could make pots of the same size, capacity, thickness, and shape after two only weeks of practice.



Figure 5.5: Firing replica vessels.

Within this time, I also developed a feel for how wet the clay should be to manipulate it properly, how to smooth the surfaces with my fingers to produce the burnished finish I wanted and when it was best to decorate the pot. Once at this level of ability, each pot took 10-15 minutes to produce. This would indicate that, particularly for the smaller bowls found on

Neolithic and Early Bronze Age sites, production

could have been done on a domestic level. The vessels could easily have been left by the hearth to dry whilst other daily tasks were performed, and, at least for the smaller vessels, the domestic hearth would have been sufficient to fire them. Larger pots would need a bigger

fire, perhaps set outside, but the fire would not need to be so large that it would show up archaeologically as anything other than a hearth feature. Gibson's (1981) experimental firing in this sort of bonfire demonstrates this.

II) Use and Taphonomy

Question 4: How long will a hand-built, open-fired pot last when used for cooking over a fire?

Although most of the pots survived the firing, because of their gradual warming, and our patience in moving them into the fire, several cracked later whilst being used for cooking, even though they were warmed before use and kept near the embers afterwards whilst they cooled. This does not seem to have been caused by poor firing as they were not spalling, but cracking right through the wall. It is probable that they were unable to withstand the temperature change from the red, glowing embers to the cooler sand in the hearth; however, once a 'good' pot was found, its use-life was much longer. For example, one pot was used to boil meat 15 times and store liquid once and is still in good condition. Therefore, it seems that a pot of this quality could last a long time if used correctly, but only if it was a pot that first beat the odds of the high breakage rate by which hand built, open fired pottery is afflicted.

This, therefore, calls into question the batch size and frequency in which people were making and using ceramics in the late prehistoric period. This has been discussed by Gibson (1981; 1986), Miket (1987; Miket et al. 2008) and Johnson & Waddington (2008) at various times in their research and most agree that the pots were produced at a local level, as no workshops have been found. Gibson's (1981) attempt to recreate a pot firing site in his experimental work, where he fired a small number of vessels in a pit with a wood fire, demonstrated that the resulting hearth-like feature barely left a trace in the soil after only one use. The remains contained charcoal and sherds, not unlike the usual pit bottoms found on Neolithic sites in the region, and may account for the lack of production sites. Supporting this is the evidence from the domestic sites where, even on the largest ones, Cheviot Quarry (Johnson & Waddington 2008), Thirlings (Miket et al. 2008) and Lanton Quarry (Waddington, forthcoming), the size of the assemblages of Impressed Ware, Grooved Ware and Beaker are still relatively small in comparison to other regions in the same period. The pottery of the study area ranges in size from small cups to very large urns. This varies during different periods and largely follows

the traditions of the ceramics known elsewhere in Britain, but the overall assemblage sizes are still smaller than would be expected for daily use at a site. Obviously, many of the vessels will not have survived because they were poorly fired and will have broken quickly and degraded even faster after deposition; but it is also probable that other sorts of vessels were made of perishable materials as well. Although a lack of evidence is not good evidence for a theory, at this time the archaeology *continues* to support Gibson, Miket and Waddington. It is assumed that the larger urns would have taken much longer to make, but if a cup can be made within 15 minutes by an amateur and fired in a small hearth fire, then it is probable that people simply made pots as they needed them on the domestic level.

Question 5: Where beeswax is found as a residue, is this an indicator of a sealant to make the pot more effective for cooking? Or, does this suggest a sealant that was used to make the pot more efficient for the storage of food or liquids?

Beeswax is a residue that has been found absorbed into the pores of pots at several Neolithic sites and has been the subject of several residue analysis experiments (Evershed et al. 2003; Regert et al. 2001; 2003; Guerra-Doce 2006). Copley et al. (2005a; 2005b) report residues of beeswax mixed with animal fats on five Neolithic vessels at Eton Rowing Lake and suggest that this represents a sealing method to aide in the pot's performance in cooking and food processing. At Cheviot Quarry, Stern (2008, 230) reports the same signature on an Impressed Ware sherd (F219), but indicates that it may represent the use of honey to sweeten food, although, "...the usual assumption is that beeswax was used as a waterproofing/sealing agent." Beeswax is still used successfully to enhance the cooking performance of wheel thrown, kiln fired ceramics in experiments (see Dineley & Dineley 2000), and so it was tested as a sealant on the prehistoric replicas to see if this may have been its purpose in the Neolithic. A clean, unused replica pot was selected and sealed with natural beeswax (obtained from a local beekeeper) by heating the wax in the pot near the fire and moving the liquid wax around until all inner surfaces had absorbed as much wax as they could. The excess beeswax was poured out and the pot left to cool at the hearth edge. In the first experiment, a pot sealed with beeswax was placed indoors alongside one that was not sealed, each with water levels of 7 cm. After 12 hours, the unsealed pot had lost half of its water and the walls were saturated, not unlike a terracotta pot, whilst the sealed pot still had a level of 7

cm. As expected, beeswax as a sealant could greatly improve the ability of such a low fired pot to store liquids, or to keep dry ingredients, such as grain, from spoiling.

Cooking performance was then tested by boiling water in a beeswax sealed pot. As the water was heated, the beeswax came to the surface, and once it had boiled, the inner surface was found to have flaked away (Figure 5.6). The second boiling was cut short when the pot began to leak.



Figure 5.6: A beeswax-sealed pot after use to boil water.

This was repeated five more times on separate vessels with the same result. When the pots

were sealed with the beeswax, the liquid wax will have soaked into the pores of the pot. However, since prehistoric ceramics are much more porous, these ‘plugs’ of wax will have been larger than those that form in wheel thrown pots. Beeswax has a lower melting point than the boiling point of water and the wax, which is hydrophobic, will have escaped to the surface of the water when heated, and due to the concentration of wax in the wall, the ceramic particles will have been forced from the pot’s surface along with the beeswax, exposing the core. It is inferred that the pot ‘melted’ because the low temperature at which it had been fired had only vitrified the external surfaces and the core was still partially clay. The pots had been effective for holding and boiling water whilst the surfaces were intact, but once exposed, they quickly fell apart. Not only does this imply that using beeswax to seal ceramics of this quality may not have been effective if they were to be used to cook liquids, but it also indicates how easily pots will have disappeared once their cores were exposed.

Question 6: How quickly do pots of this quality deteriorate when exposed to the elements, and when buried?

A second experiment examined the survival ability of the sherds under study. As already remarked, although many of the Early Bronze Age pots have been found whole (largely because they were preserved in cist burial contexts), much of the Neolithic pottery is composed of small sherds that represent only small portions of individual pots. It was

hypothesized that this is largely due to taphonomic reasons, and was not evidence that the region had made less use of pottery than other parts of Britain. To test how quickly pots of this quality break down, two pots were placed in the contexts where they are most often found at Neolithic sites in the area. One pot was buried in a shallow pit, and the other left exposed on the surface. It is acknowledged that there are many factors that affect taphonomy, including soil acidity, climate, and groundwater. The location in Wooler, Northumberland was chosen so that the results could be compared, at least illustratively, to the Neolithic sites in the immediate area, notably those of the Milfield Basin.

After 11 months, the pots were hand excavated using standard methods. The exposed pot on the surface at first proved difficult to find because, in less than a year, the pot had broken down into a few small, abraded sherds that were piled where the pot had been left (Figure 5.7). These were still ceramic with brick red surfaces and a black core, but were very friable



Figure 5.7: The remains of the exposed pot after 11 months.

and crumbled at the touch.

This is not unlike much of the lithic tempered pottery in the Milfield Basin that is found in similar contexts. In the immediate area, Neolithic and Bronze Age sherds with a similar friable fabric were discovered at Yeavinger Henge (Harding 1981), Thirlings (Miket et al. 2008), Old Yeavinger (Hope-Taylor 1977), Whitton Hill (Miket 1985), and Cheviot Quarry (Johnson & Waddington 2008).

All of these sites are located within one mile of Wooler and the contexts of the finds were in ploughsoil, ditch fills, or pits.

The buried pot, however, was found still intact, but the moisture of the groundwater had penetrated its walls and saturated its core to the extent that it was reduced to the leather-hard stage (Figure 5.8). Interestingly, the fluting effect near the rim, caused by the method in which it had been smoothed, was still visible, but the pot itself had bent slightly and cracked on one side (Figure 5.9). If left much longer, it is probable that the pot would disappear entirely, remaining as a clay lens in the soil. However, sherds, and indeed, the remains of large portions of individual pots have been found in pit contexts so this cannot have happened to every pot in prehistory.



Figure 5.8: The buried replica pot after 11 months in the soil.



Figure 5.9: The contours left on the surface of the buried vessel were still visible, although the pot was much degraded.



Figure. 5.10: The remains of two vessels in Ontario, on the surface and in the pit.

As a control, a replica pot had been buried in Ontario, Canada as well. This was for the purpose to evaluate if the pots' breakdown was conditional to local soil conditions and weather or if it was due to the quality of the pot itself. While this experiment was only meant to be illustrative, it was also informative. After one year, the pot in Ontario was found to also have broken down in a similar way. The difference with this pot was that

sherds of a similar size and wear to the archaeological material remained under the surface amongst the decomposing clay (Figure 5.10). Indeed, the weather of 2009/2010 was unnaturally extreme in Northumberland and, although there would have been unusual weather during the Neolithic and Bronze Age as well, it may be the reason that the pots in Wooler degraded so much faster than the ones in Ontario. It could also be that these results demonstrate that the remains may have survived in the form that they did because of the way they were manufactured, specifically, that they were unevenly and incompletely fired, as is common when open firing pots. If this is correct, it would suggest that the pot in Wooler may simply have been more poorly fired than the one in Ontario and the vessels in Ontario were differentially fired across the surface of the vessel, causing only the fully fired portions to survive the year underground. Clearly, these low fired pots are very vulnerable to the various

taphonomic pressures placed on them when they are buried and left exposed and, as was seen with the beeswax experiments, once the core is exposed the rest of the pot degrades very quickly. If a pot on the surface can be reduced to a few small sherds in less than a year, and one buried in a pit can degrade this quickly, then it is obvious that the remains found on site may represent only the best made fraction of the original assemblage. Moreover, since all of the pots were made at the same time with the same materials and processes, they should have degraded the same way, but the fact they did not suggests that even pots fired in the same fire can have very different levels of firing in their fabrics and that this variability makes it less predictable which pots will survive - something that was imperative to keep in mind when the ceramics of the Borders region as a whole were analysed as a representation of the past.

The Dataset

A total of 333 vessels (some in sherds) that date from the Middle Neolithic to the middle of the Bronze Age were available for study. These include: 49 Impressed Ware and 16 Grooved Ware pots from the Neolithic period; 15 non-Beaker vessels that are contemporary with the 97 Beakers that were examined; and 75 Food Vessels and 81 cinerary urns, including Cordoned and Collared varieties, Vase Urns and Bucket Urns from the Early/Middle Bronze Age. The ceramic vessels that were studied are currently preserved at National Museums Scotland in Edinburgh, the British Museum in London, Great North Museum in Newcastle upon Tyne, Tweeddale Museum in Peebles, The Scottish Borders Museum in Hawick, and the Lanarkshire Museum in Hamilton.

The data presented in the tables (5.1-5.10) below is an overview of the more detailed information, presented in Appendices 2-11, that was gathered and used for the analysis in Chapter 6. The photographs in the tables are those that were taken during the examination for reference later in the PhD research, but it became apparent that they provide other information, such as surface details (seed impressions, straw impressions, etc..) that cannot be discerned from drawings. It is for this reason they have been included in these results. The drawings in Tables 5.1-5.10 are copies from the original site reports and, in the case where the vessel has been drawn more than once, the additional examples are also included. In some cases, the pot has not been drawn at all, and so the space has been left blank.

The subtypes listed in the tables are based on the original conclusions made by the excavators, but in the case that no subtype was given, the word, 'fits' has been used to indicate that the vessel has been placed in its most probable category. The analyst, whose categorisation is used, is listed. In some cases, there is disagreement with the original conclusions and this is also recorded in the tables and argued for in the appendices.

The description of the fabric begins with words, such as 'gritty' or 'sandy'. This is meant to describe the surface texture and feel that it has when touched, rather than the fabric matrix. The composition of the matrix is then explained.

In some cases, although a vessel was not available for study, the information in the site report was detailed enough to include it in this research. However, since these vessels were not examined by this researcher, their details are listed in separate Tables 5.11-5.17. The data from these pots are not listed in the appendices as that is a resource of the data gathered first-hand for this thesis and the conclusions listed are those of the analyst since they were not examined for this research.

The museum in which the vessel is kept and all known publications about the pot is then listed and should be accurate as of the date of this thesis; however, it must be noted that their location may change in the future.

CHAPTER 6: ANALYSIS AND INTERPRETATION

An attempt has been made in this doctoral research to consider the late 3rd and early 2nd millennia BC through the ceramic remains over a broad temporal and spatial sequence. This perspective has been taken partly because there are fewer ceramic remains in the Tyne-Forth region than other places, but it is also an effort to challenge any influences that modern ideas about the past, which we have broken up into arbitrary ‘ages’, may cause. The geographic area is not considered to be a cultural region itself, but simply a generic landscape from which to consider cultural interaction. From the resulting dataset, generalisations can be made for each period. In each of the pottery traditions, the evidence supports that the Tyne-Forth region was distinct from national generalisations, but people in this area were still very much aware and a part of those greater Neolithic and Bronze Age trends. It was found, however, that the data at this time is too sparse to determine more than the most general evidence for cultural grouping in the study area.

The Ceramic Traditions

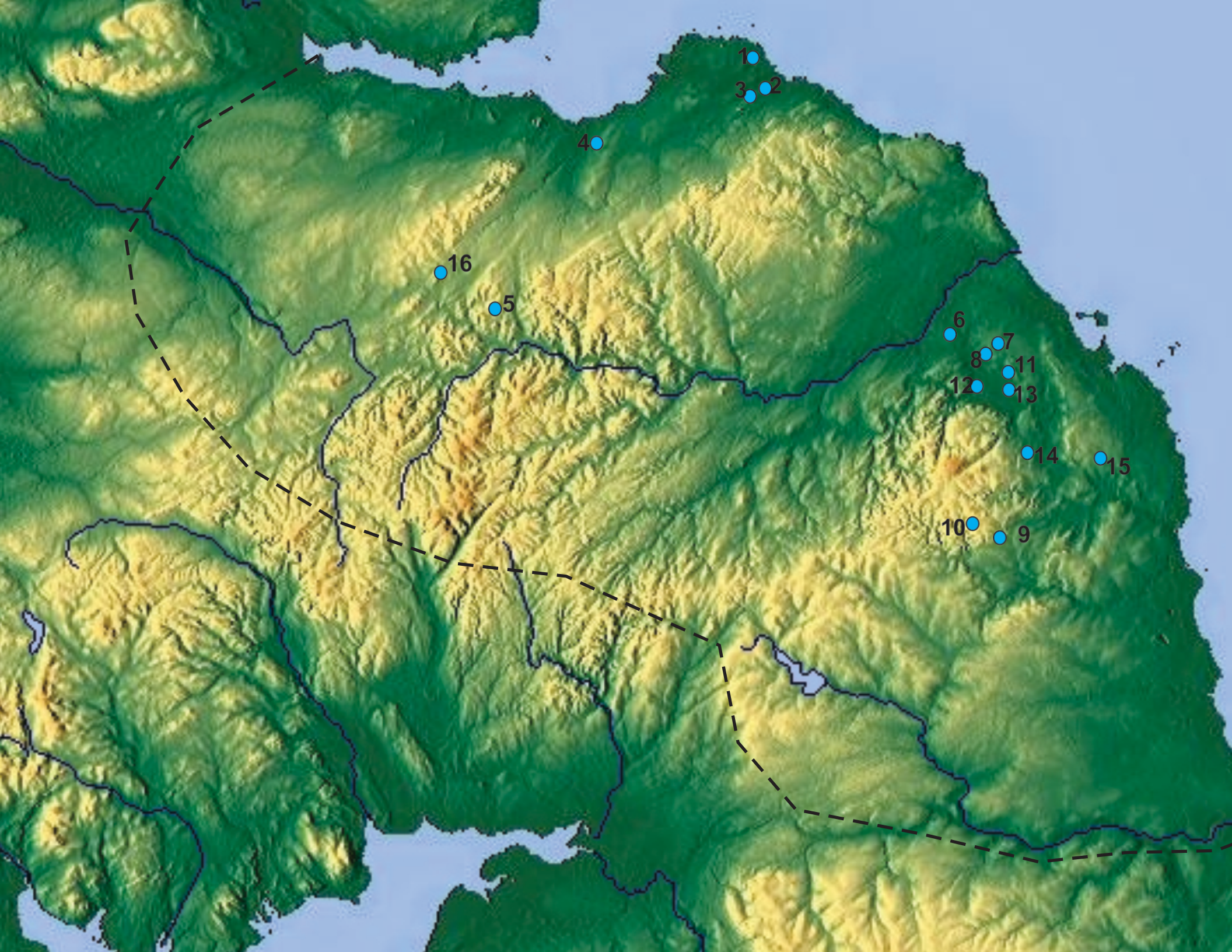
Impressed Ware

Impressed Ware is found on 15 sites in the Tyne-Forth region: Hedderwick, Overhailes, Knowes Farm and Pencraig Wood (all East Lothian); Dalkeith (Midlothian); West Water Reservoir and Meldon Bridge (both Peeblesshire); Crookhaven, Red Scar Bridge, Lookout Plantation, Heatherwick, Old Town Farm, Cheviot Quarry, Lanton Quarry and Thirlings (all Northumberland) (see Map 6.1). The sherds from six of these sites were available to be examined for this research. All of these sites consist of domestic pits or deposits and, with the exception of Meldon Bridge and West Water Reservoir, are found at lower elevations in valleys or on plains near the coast. Several, including Hedderwick, Cheviot Quarry, Lanton Quarry and Thirlings, are large, multi-phase sites, yielding greater numbers of vessels (for example, 29 vessels were uncovered at Hedderwick). In addition, the large palisaded complex of Meldon Bridge demonstrates that the people of the Middle Neolithic had a command of their landscape. Therefore, it should, not come as a surprise that they could construct the large, Impressed Ware vessels, and that communication could have been far-reaching enough for the styles to permeate all corners of Britain.

Map 6.1: Impressed Ware Sites

1. Hedderwick, Dunbar, East Lothian (29 vessels)
2. Overhailes, (East Linton), East Lothian
3. Knowes Farm, East Lothian
4. Dalkeith, Midlothian
5. Meldon Bridge, Peeblesshire
6. Lookout Plantation, Northumberland
7. Crookhaven, Northumberland (6 vessels)
8. Red Scar Bridge, Northumberland
9. Heatherwick, Northumberland
10. Old Town Farm, Northumberland
11. Cheviot Quarry, Milfield, Northumberland (2 vessels)
12. Lanton Quarry, Milfield, Northumberland (9 vessels)
13. Thirlings, Northumberland
14. Wether Hill, (Ingram), Northumberland
15. Bewick, Old Bewick Moor, Northumberland.
16. West Water Reservoir, (West Linton), Peeblesshire

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD.



The Impressed Ware found in the Forth-Tyne region demonstrates clear characteristics of the wider Mortlake and Fengate styles; however, local variants, particularly the Ford and Meldon Bridge substyles, prevail on both sides of the Anglo-Scottish border (Table 6.1). Both the Ford and Meldon Bridge substyles appear to be developed from the Mortlake style as they are characterised by moulded rims, deep cavetto-like necks, prominent carinated shoulders and rounded, but narrowing walls. No bases have been found and so it is not certain whether they were flat or round-based, but if they follow the Mortlake style, their bases most probably were rounded.

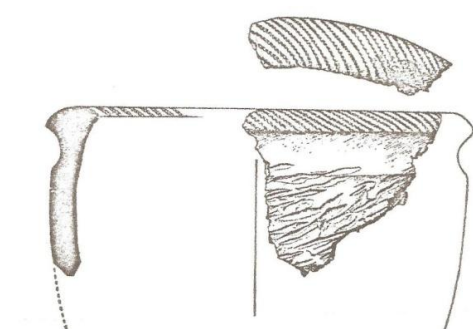


Figure 6.1: An example of the Ford substyle from the Greenwell Collection (from Longworth 1969, 259).

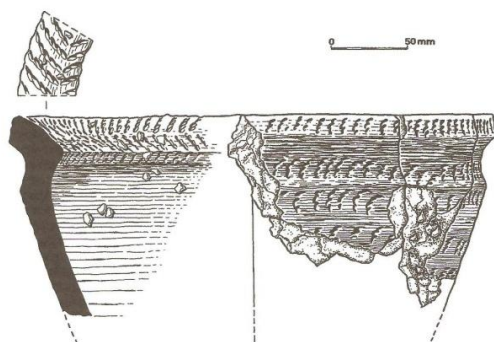


Figure 6.2: An example of the Meldon Bridge substyle (from Speak & Burgess 1999, 63)

The Ford substyle, named for the sherds found by Canon Greenwell near Ford, Northumberland, follows the Mortlake style more closely as the rim is moulded so that its top is convex and rounded, although some examples are more flattened (Figure 6.1). In contrast, the Meldon Bridge substyle is typified by a flattened rim top that slopes in and down on the inside of the vessel, although some are less sloped than others (Figure 6.2). The neck of the Ford vessels is also closer to Mortlake with a prominent shoulder carination, standing above splayed walls, whilst the Meldon Bridge vessels have overhanging rims and gentler necks that blend into the vase-shaped walls of wider open bowls. The Ford substyle is found at Crookhaven, Red Scar Bridge, Cheviot Quarry, Thirlings and Lanton Quarry, and the Meldon Bridge substyle at Meldon bridge, Hedderwick and Knowes Farm. However, the Ford substyle is also seen at Hedderwick, in the north of the study area, and the

Meldon Bridge substyle is represented at Thirlings, Heatherwick and Old Town Farm, in Northumberland. So clearly, no border separates these substyles within the Tyne-Forth region and they do not represent distinct cultural groups beyond a general local interpretation of the national trends.

The Fengate style is less prevalent in this study area, but it appears to be more variable in its style and decoration on individual sites than the Ford or Meldon Bridge substyles. Sheridan

describes the assemblage from Overhailes Farm (East Lothian) as being represented mostly by open mouthed, vase shaped vessels with narrow bases and decoration that is kept to the rim of the pot (Lelong & Pollard 2008). The same can be found at Thirlings in Northumberland, particularly on P60 and P72.4 (Miket et al. 2008; Figures 6.3 and 6.4). However, the collared variety is also represented by V1 at Overhailes (MacGregor & Stuart 2008, 74; Figure 6.5) and at Thirlings on P57.4, P57.7, P57.8 and P59 (Miket et al. 2008; Figures 6.6-6.9); with all of these pots, the decoration has a much greater range of motifs and use thereof (Lelong & Pollard 2008). Overhailes is contemporary with Knowes Farm, a Meldon Bridge substyle site located only 1 km away (Lelong & Pollard 2008), and at Thirlings, where more sherds represent Fengate-style pots, there are still several examples of the Ford and Meldon Bridge substyles. Fengate style and Mortlake style are known to overlap temporally (Gibson 2002a, 80), and this demonstrates that this was occurring even at a most local level in this area. There may have been a different attitude towards one style than to the other and, whereas Fengate style could use a greater range of forms and decoration and the Mortlake substyles were more specific and modest in their range, they may have been used differently or by different people.

The data collected from the six available assemblages show a range of forms from open bowls to more closed pots and a variety of sizes. The wall thickness is greater in Impressed Ware than later types of pottery, with some as great as 25.5 mm, but most vessels have walls that are 10-12 mm thick. Hedderwick, in particular, has a very consistent wall thickness of 10.1-10.5 mm on all of the 21 vessels that were examined. The rim diameters that were discernable ranged from 160-280 mm, although most are about 200 mm.

Most of the examples in the assemblages that were examined had fabrics that were gritty, although clay-rich was the second most common fabric texture. The inclusions include: dark grey lithics, white lithics, natural gravel, sand and grog and for the most part, the lithics had been prepared and were angular. In most of the assemblages, they fit into the large (5-7 mm) and very large (7-9 mm) categories. The exception to this is at Hedderwick where vessels tempered with small (2-3 mm) and medium (3-5 mm) lithics predominated, although this may be due to the consistent thinner walls than at the other sites and may represent a local interpretation of the tradition.

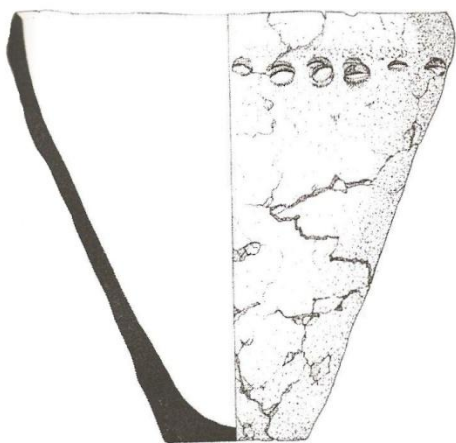


Figure 6.3: An example of Fengate style Impressed Ware from Thirlings, P60, Northumberland (from Miket et al. 2008)

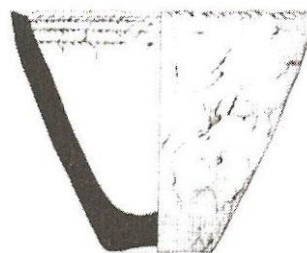


Figure 6.4: A second example, P72.4, of Fengate style from Thirlings, Northumberland (from Miket et al. 2008)

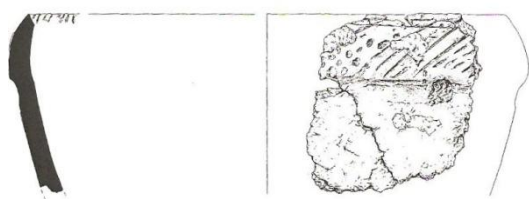


Figure 6.5: An example, V1, of Fengate Ware from Overhailes Farm, East Lothian (from MacGregor & Stuart 2007, 74)

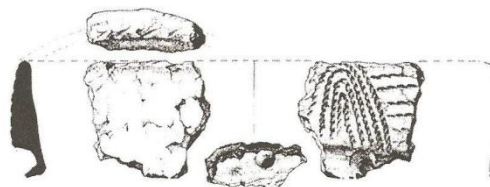


Figure 6.6: Fengate Ware pottery, P57.4, from Thirlings, Northumberland (from Miket et al. 2008)



Figure 6.7: Vessel P57.7 from Thirlings, Northumberland demonstrates the overhanging collar of Fengate style Impressed Ware (from Miket et al. 2008)

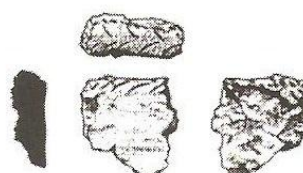


Figure 6.8: Vessel P57.8 from Thirlings, Northumberland (from Miket et al. 2008)

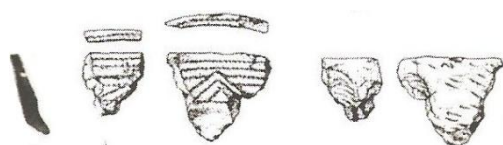


Figure 6.9: Vessel P59 has a straight neck with a slightly in-turned collar and flat rim top. It fits into the Fengate Style of Impressed Ware as well (from Miket et al. 2008)

Of particular interest are the assemblages from Lanton Quarry and Cheviot Quarry. The vessels from Lanton Quarry were of a very sandy texture, whilst at Cheviot Quarry, the pot fabric was especially gritty, even though the two sites are adjacent to one another. This might suggest a different clay source or different traditions in potting clay manufacture. Although radiocarbon dates cannot determine if the remains are from individuals living side by side or if they represent generations of people who lived in the same area over time, two vessels found at Cheviot Quarry (P2) and Lanton Quarry (P768, P832-4, P763-6) certainly link the two sites (Figures 6.10 and 6.11). Both of these vessels have the same flattened rim top, moulded rim edge, deeply concave neck and prominent shoulder carination. They are both decorated with finger-pinched rustication directly under the rim, through the neck and over the shoulder carination and both have horizontal rows of twisted cord bordering this (although on one this is on the rim whilst the other has twisted cord beneath the rustication on the body). The two vessels were obviously made by separate individuals who made their clay according to their group's tradition, but it would seem that they were aware of each other or of each other's work.



Figure 6.10: A rim sherd from vessel P2 from Cheviot Quarry, Northumberland.



Figure 6.11: The rim sherd from Lanton Quarry shares stylistic similarities to P2 at Cheviot Quarry in decorative style and form.

The Impressed Ware of the Forth-Tyne region follows the range of decorative motifs typical of the tradition: impressions of twisted and whipped cord, pinched rustication, fingernail impressions, slashes, grooves, and in one case, the impression of a shell or impressions to make a shell shape (Hedderwick, NMS X.BM55; Figure 6.12). For the Ford and Meldon Bridge substyles, this decoration is baroque in its execution, whereby every inch of the vessel is decorated (except for the neck cavetto in the Ford substyle). Rows of repeating impressions are most common on the rim tops; for

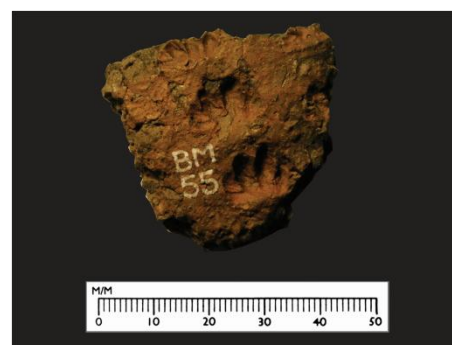


Figure 6.12: NMS X.BM 55 from Hedderwick, East Lothian is decorated with the impression of a

example, there are rows of twisted cord at Meldon Bridge, Hedderwick and Thirlings; incised herringbone at Crookhaven and Meldon Bridge; and birdbone impressions at Hedderwick (Figure 6.13). At Crookhaven, sherds 1744 and 1745 have concentric semi-circles in twisted cord around the rim top (Figure 6.14). On the body of the vessels, rows of birdbone impressions are seen at Meldon Bridge, Crookhaven, Hedderwick, Cheviot Quarry and Lanton Quarry (Figure 6.15) and short cord impressions, randomly set, stylistically link Thirlings, Crookhaven (1743b; Figure 6.16) and Hedderwick (Figure 6.17). These motifs and the placement of them on the vessel do not correlate to the substyle of the vessel's form and so the same sorts of impressions are found on Ford and Meldon Bridge substyle vessels alike.



Figure 6.13: Incised herringbone decoration on the rim top of a sherd from Hedderwick, East Lothian.



Figure 6.14: Semi-circles of twisted cord ornament the rim top of a Ford style sherd from Crookhaven.



Figure 6.15: Rows of birdbone impressions ornament the exterior surface of sherds at Hedderwick, East Lothian.



Figure 6.16: Rows of short cord impressions are used for decoration on sherd 1743b at Crookhaven, Northumberland.



Figure 6.17: Short rows of cord impressions on NMS X.BM 592 from Hedderwick, East Lothian.

The use of decoration on the Fengate style pottery, however, is much more varied in the types and combinations of motifs used, but the placement of the decoration tends to be more constrained. Many vessels are decorated only near the rim, such as those at Overhailes and Thirlings, and the undecorated or more sparsely decorated sherds found at Lanton Quarry may be placed within this category for this reason. Slashes, twisted cord and grooves in diamond and triangular shapes on the collars, followed by a row of stabmarks just beneath are seen on the inside and outside of the rims of collared vessels at both Overhailes (V1, V2) and Thirlings (P57.3, P57.4, P57.6, P57.7, P59, P69.4). A roughened surface is made on the external side of vessels at Thirlings (57.6; Figure 6.18) and at Hedderwick (NMS X.BM 611; Figure 6.19): both of these vessels have rows of cord inside the rim. However, both sites also yielded many more body sherds with fragments of decoration, demonstrating a more complex style than the few pots listed above can indicate.

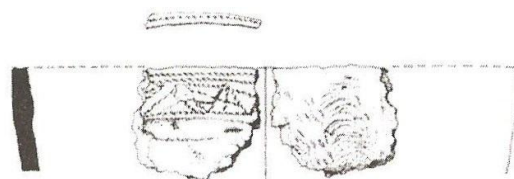


Figure 6.18: P57 from Thirlings with a roughened surface on the external side of the sherd (from Miket et al. 2008)



Figure 6.19: NMS X.BM 611 from Hedderwick, East Lothian bears a similar roughening on its external surface.

The greatest problem concerning the Impressed Ware of this region is the lack of securely-dated contexts. Only three of the sites have dates that are directly associated with the pottery and each set of dates (with the exception of one date from Cheviot Quarry) is set within large margins of error. A carbonised residue found on an Impressed Ware sherd in pit MAP/F204 (OxA-16099) at Cheviot Quarry was calibrated (OxCal09) to 3082-2898 cal BC, but the rest

of the dates from Cheviot Quarry and those from Meldon Bridge and Thirlings (Appendix 12) give a vast temporal range of c. 3600-2600 cal BC. It is probable that this has created an impression that the style had a broader temporal phase than actually was the case and disregarding these more extreme dates causes the set of the narrowest dates to show a consistent range around the beginning of the third millennium BC to end with a slight overlap with the earliest Grooved Ware at Cheviot Quarry (OxA-16178, recalibrated to 2877-2624 cal BC).

The Impressed Ware of the Tyne-Forth region is comprised of unfortunately few sites, albeit intensively-used ones, and the remains of the vessels are fragmentary and, for the most part, only represent 1-5% of the original vessel. This poor preservation draws attention to the fact that it cannot be known how many more vessels did not survive at all and so a statistical analysis is difficult. What remains is sufficient to give evidence for the Mortlake and Fengate styles that reached the study area from elsewhere and the substyles that developed as local innovations. Some indication for interaction can be discerned at the local level as well.

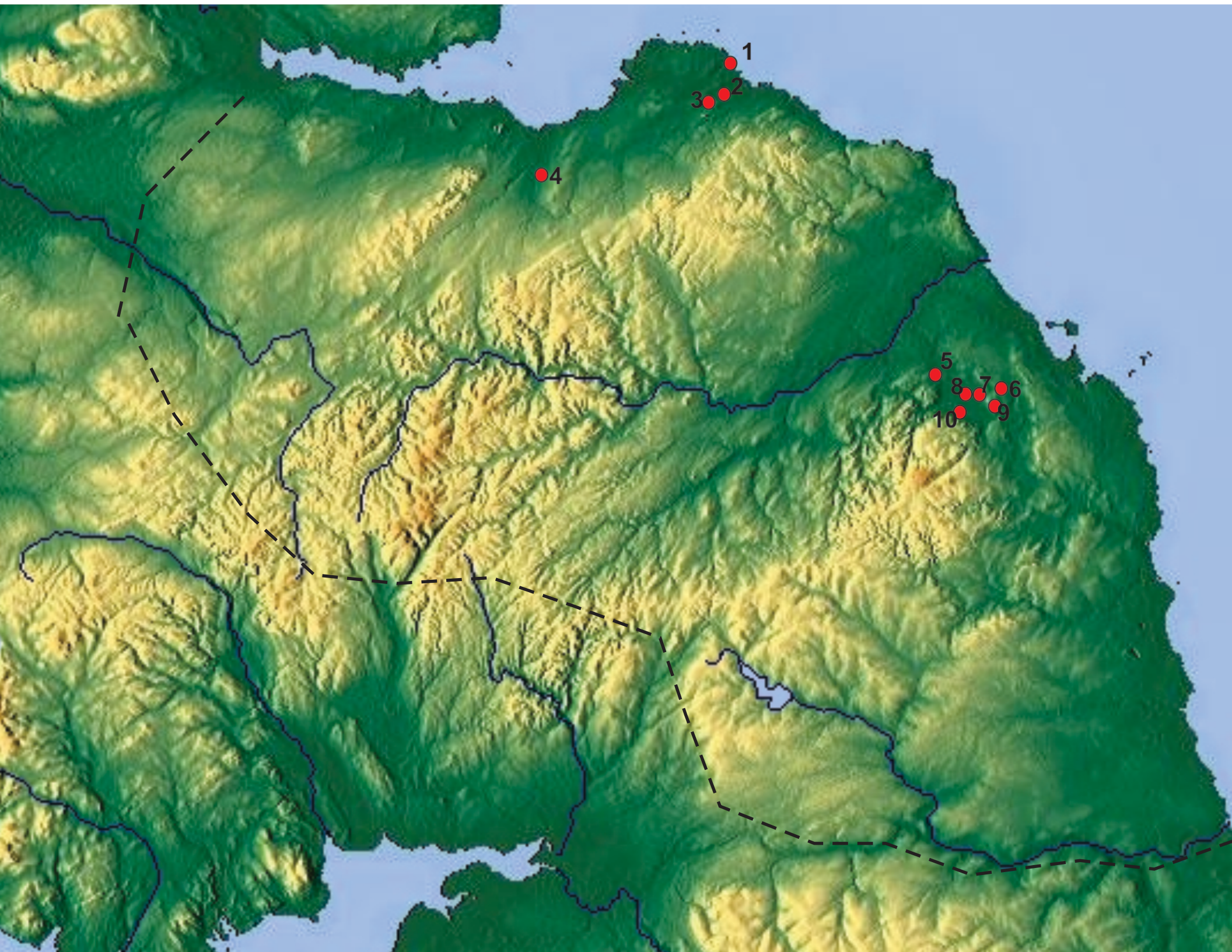
Grooved Ware

It is perhaps one of the most important outcomes of this doctoral research that a clearer understanding of what Grooved Ware looks like in the Tyne-Forth region is achieved (see Table 6.1 for a comparison of local Grooved Ware with the national substyles). Too frequently the assemblages from Northumberland and the Scottish Borders have been approached as a bridge between larger assemblages from North Yorkshire and those found at the Scottish sites in Fife and Orkney, rather than being considered in their own right. Attempts were made by Ferrell (1990) and Gibson (2002a, 2002b) to reconsider the Grooved Ware of Northumberland, and by Sheridan (2007) in the Scottish Borders, and links over this border have been discussed for site reports and smaller studies, but no real definition of the Grooved Ware of the region has been published. In addition, studies of Grooved Ware on the national scale continue to overlook the region, despite the fact that the trends bear important implications for current themes in the interpretation of the period: how and why Grooved Ware was used and viewed by people. It is possible that this is because the sites in the Tyne-Forth region have smaller assemblages than at sites such as

Map 6.2: Grooved Ware Sites

1. Hedderwick, (Dunbar), East Lothian (3 vessels)
2. Overhailes, (East Linton), East Lothian
3. Eweford, Area 5, (Lower Hollows), East Lothian
4. Lamb's Nursery, (Dalkeith), Midlothian
5. Milfield North pit, (Milfield), Northumberland
6. Ewart I, Northumberland
7. Cheviot Quarry, (Milfield), Northumberland (9 vessels)
8. Lanton Quarry, (Milfield), Northumberland
9. Thirlings, (Milfield), Northumberland (3 vessels)
10. Old Yeaving, (Wooler), Northumberland

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD.



Carnaby Top or Balfarg Riding School, but this does not mean that their study will not be meaningful.

Grooved Ware has been found on 9 sites in the study area: Hedderwick, Eweford West, Overhailes (all in East Lothian); Lamb's Nursery (Midlothian); Ewart I, Cheviot Quarry, Thirlings, Yeaverling, and the Milfield North Pit (Northumberland) (Map 6.2). All of these sites are in lowland areas, and are found in the same locations as the Impressed Ware sites, but a greater variety of site types is present as pits and deposits, a pit alignment and a burial monument. At Yeaverling, the large pit 'C' that contained all of the Grooved Ware pottery found on the site was concluded by Hope-Taylor (1977) to be a ritual pit; however, later re-analysis by Ferrell (1990) and Gibson (2002b) demonstrated that there is no more evidence of ritualisation than in the pits found on domestic sites of the period. For the purpose of this research, it is ascribed to a 'pit' category that tends to lean towards the domestic, based on the associated material found in the pit. Of these sites, three were analysed for this project (Hedderwick, Ewart I and Cheviot Quarry), whilst the data gathered for the previous Master's research from three other sites (Yeaverling, Thirlings and Milfield North Pit) was used since the material was no longer available for study.

Characteristics that are known from all of the Grooved Ware substyles are present in the region. Simple rims, combined with straight or splayed walls and flat bases, create forms that range from cups to jars and buckets, but most are medium-sized vessels with wall thickness of 7-9 mm and rim diameters of 170-190 mm. The rims are simple with squared, rounded or pointed rim tops, fitting the Clacton and Durrington Walls substyles, but 'stepped' and internally-bevelled rims, typical of the Durrington Walls and Rinyo substyles are also seen at Cheviot Quarry (P2; Figure 6.20) and the Milfield North Pit (009-13) (Figure 6.21). In one case, a large rim and body sherd from Yeaverling (25F) displays applied pellets on the rim top that forms the scalloped rim known from the Rinyo substyle (Figure 6.22), but other characteristics on this sherd, such as horizontal cordons with squared-off ends on the body of the vessel, might find it a better place within the Woodlands substyle.



Figure 6.20: A stepped rim profile on P2 from Cheviot Quarry, Northumberland.

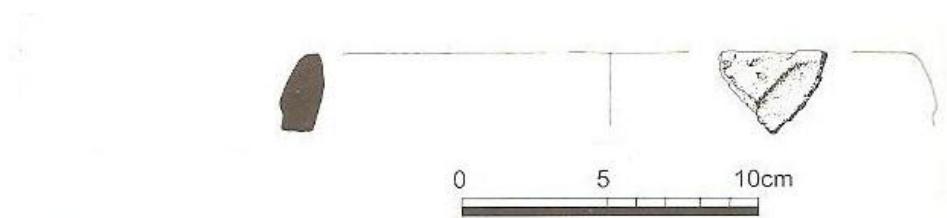


Figure 6.21: Vessel 009-13 from Milfield North Pit, Northumberland bears a similarly bevelled rim type to P2 from Cheviot Quarry (from Johnson & Waddington 2008).



Figure 6.22: P25F from Yeavering, Northumberland is ornamented on the rim top with applied pellets that form a scalloped edge on the rim.

The fabric of the Grooved Ware tends to have a much sandier texture than the other traditions studied; this is especially so at the Milfield North Pit assemblage. Most of the inclusions are subangular or rounded, which are interpreted as being more natural than angular or crushed lithics that show obvious manipulation. The Grooved Ware fabrics demonstrate a greater variety of types of lithics incorporated into the clay matrix between sites. The size of these inclusions is much more consistent than in other periods and is small (2-3 mm) and medium (3-5 mm), which suggests that it was the size of the lithics used, and therefore, the texture of the paste created, that was more important than what was put into (or kept in) the clay. This is in contrast to the Grooved Ware elsewhere, for example the shell-tempered vessels from Durrington Walls where Cleal (1995) identified bivalves as temper that was an important

additive linking those Grooved Ware sites to the sea. The pottery from Ewart I also contained grog, which is commonly found in Grooved Ware. It is possible that this may have been used at other sites, but it was not visible in the cross-sections of the sherds available for study.

The decoration on the sherds demonstrates affinities with all of the Grooved Ware substyles defined by Isobel Smith (1974), but the Clacton and Durrington Walls substyles are the most common, with fewer Woodlands substyle sherds composing the assemblages. Motifs include: rows of horizontal grooved lines, ladder, fingernail impressions, twisted cord, incised/grooved diamonds that are infilled with maggot impressions, lattice, stabmarks, applied cordons and applied pellets.

The Clacton substyle is most frequent and is marked by sherds that have parallel, horizontal grooves under the rim on the inside, such as the material known in Yorkshire (Manby 1999). This is found at Ewart I, Cheviot Quarry, Yeavinger, Hedderwick, Lamb's Nursery and Eweford (Figure 6.23). Grooved diamonds, infilled with twisted cord maggots are found on P2 at Cheviot Quarry (Figure 6.24), and multiple grooved chevrons ornamented sherds at Thirlings (P114.1, P114.2) and Cheviot Quarry (P2) (Figure 6.25). Parallel incised lines, forming a triangular-shaped edge, are also found at both Cheviot Quarry (P4) and Lamb's Nursery (9.1) (Figure 6.26).

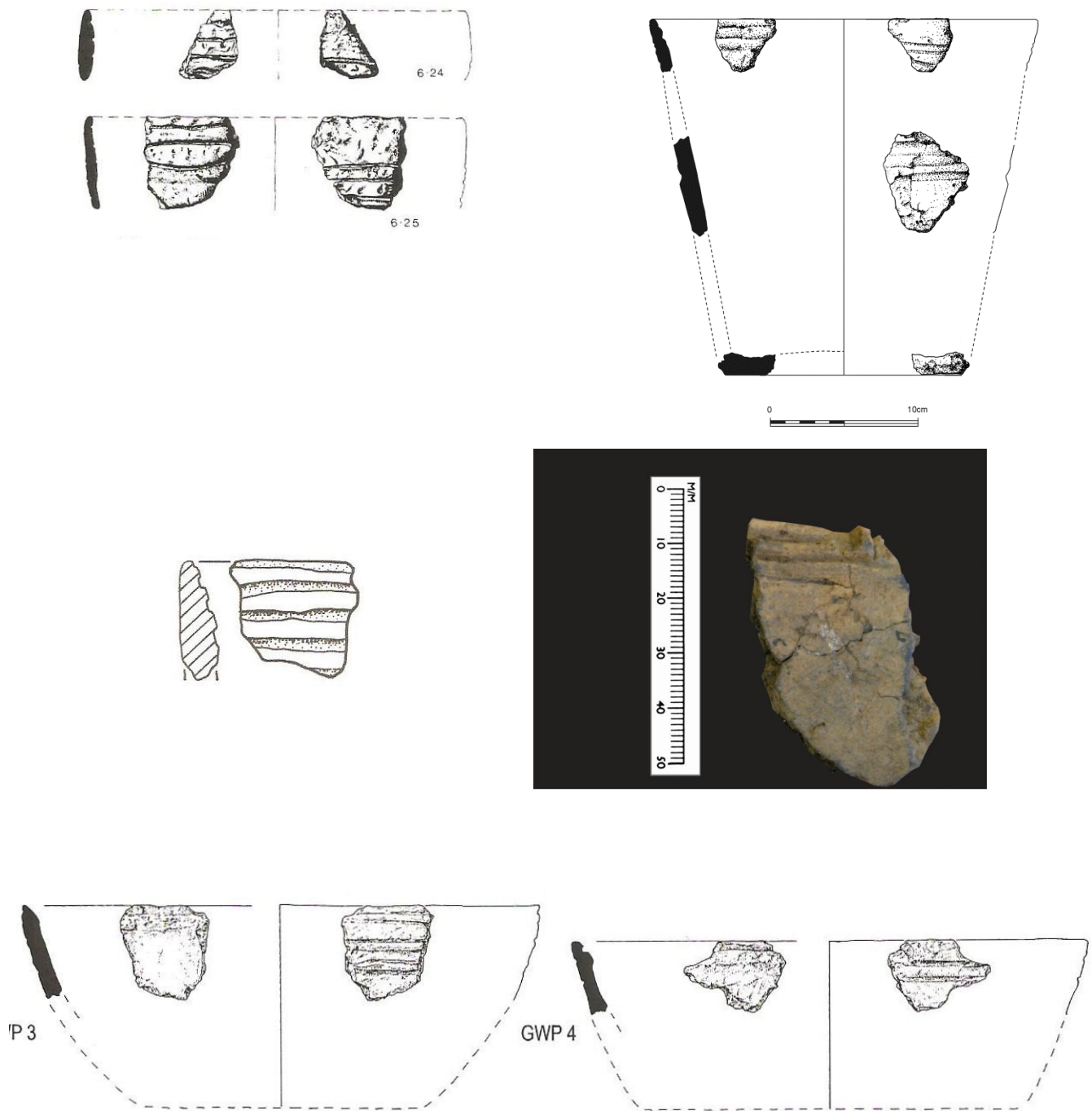


Figure 6.23: Examples of Clacton substyle Grooved Ware from Ewart I, Northumberland (top left, from Miket 1981, 144); Cheviot Quarry, Northumberland (top right, from Millson et al. 2012); Lamb's Nursery, Midlothian (middle left, from Cook 2000, 104); Yeavering, Northumberland (middle right); Eweford, East Lothian (bottom, from MacGregor & Stuart 2007, 74).

The Durrington Walls substyle is found on sherds from Hedderwick, Thirlings and Milfield North Pit. The use of twisted cord in lines is seen on sherds NMS X.BM 592, NMS X.BM 57, NMS X.BM 583 and NMS X.BM 590 at Hedderwick and the same combination of vertical cordons creating panels that are infilled with grooved chevrons, decorates NMS X.HR 563 at Hedderwick, P15 at Thirlings, Lanton Quarry and 009-29 and 009-56 at Milfield North Pit (Figure 6.24).

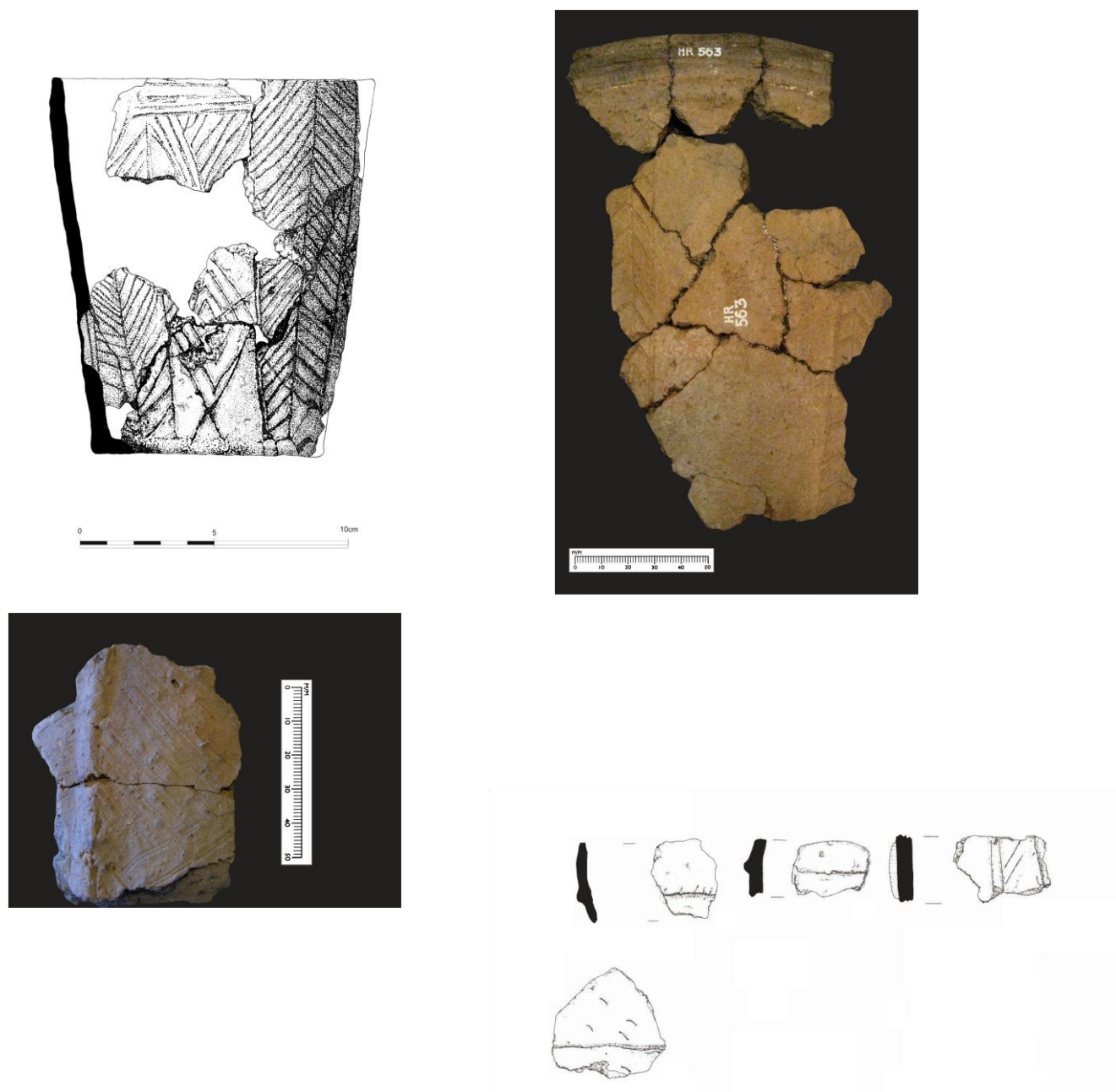


Figure 6.24: Durrington Walls substyle Grooved Ware remains from: Lanton Quarry, Northumberland (top left, from Millson et al. 2012); Hedderwick, East Lothian (top right); Milfield North Pit, Northumberland (middle); and Thirlings, Northumberland (bottom, from Miket et al. 2008).

The Woodlands substyle is mostly identifiable by the use of the ladder motif whereby parallel grooves create raised lines that are slashed in a perpendicular direction. This is present on vessels at Yeavinger (17-20, 22, 23, 25, 26, and combined with lattice on 24) and at Eweford (GWP 5, GWP 8) (Figure 6.25). Also, at Milfield North Pit, applied cordons are set in a diagonal direction on a rim sherd (009-13, 009-46).



Figure 6.25: Examples of Woodlands substyle Grooved Ware from: Yeavinger, Northumberland, sherd 19 (top left); sherd 20 (top right, from Millson et al. 2012); sherd 23 (middle, from Millson et al. 2012); sherd 24 (bottom right); and GWP 5 from Eweford, East Lothian (bottom left, from MacGregor & Stuart 2007).

Through the Tyne-Forth region, the consistency of the Clacton, Durrington Walls and Woodlands substyles, described by Wainwright & Longworth (1971) and Smith (1974) contradicts the arguments that have arisen in the past few decades. There are some vessels that show a mixing of traits, for example, the stepped rims (typical of Durrington Walls substyle) are found on pots that have horizontal grooves (characteristic of Clacton substyle) at both Cheviot Quarry and Milfield North Pit. At some sites, examples of the different substyles on separate pots were found together (Hedderwick, Eweford and Yeavinger), but on the whole, the data supports the existence of the substyles. It seems that the way the vessels were used is what makes the study area different.

It is generally accepted that in Britain, the Grooved Ware substyles were used at specific site types, and thus were treated differently in the past (Wainwright & Longworth 1971; Thomas 1999; 2010). Durrington Walls substyle is usually found at monuments and the Woodlands substyle tends to be in pits, but in the Tyne-Forth region, the Durrington Walls sherds were found at Hedderwick, Thirlings and Milfield North Pit, all domestic sites. The only monumental site in the study area that yielded Grooved Ware was at the burial monument at Eweford, which had an assemblage that best fit the Clacton and Woodlands substyles. It is true that most of the Woodlands substyle were found in pits at Yeavinger, Eweford and Milfield North alongside charcoal, burnt hazelnut shells and other domestic debris, but to say that Woodlands substyle is generally found in pits, particularly in this area, is arbitrary. There are some surface finds, but most Neolithic and Bronze Age sites comprise only the truncated bottoms of pits and so all of the substyles could be said to be found in pits, as well as most of the ceramic traditions. Moreover, the nature of a Neolithic pit, particularly in this region, can be difficult to grasp, as Edwards (2009; 2012) has shown.

It seems that what is more important is to attempt to understand why Grooved Ware was adopted and how it reflects past action. Thomas (2010) argues that Grooved Ware represents a symbol of new ideas surrounding the concept of the 'domestic' that migrated from Orkney to the south of England during the 3rd millennium BC. In contrast to the Middle Neolithic, when houses were more ephemeral, ceramic styles were more regional and people more mobile, the Grooved Ware ideology brought more permanent houses (specifically in a round shape, as those at Skara Brae, Barnhouse and the other Orcadian settlements of the era), greater long-distance links and ideas of domestication, where people settled in one place (Thomas 2010, 7-8). Thomas supports this with good, up-to-date evidence from Wessex in

comparison to the latest data from Orkney and he attempts to demonstrate that the Grooved Ware sites, in between these two areas, show the movement of an ideology of domestication. “...In the area between the Scottish lowlands and Wessex [Grooved Ware] was increasingly employed in practices that elaborated and dramatized the domestic”, that re-create the shape of the Orcadian house (Thomas 2010, 7-8).

Ceramically-speaking, Grooved Ware does represent a great shift to an extent that is further than just decorative motifs; it is a very different kind of ceramic than the other prehistoric wares. In this region, it has a finer fabric than the gritty Impressed Ware or Bronze Age wares and more specific decorative style that is only really paralleled with Beakers. However, this does not necessarily mean that it represents a major change in culture. Thomas’ argument is based on the larger assemblages from northern Scotland, sites such as Balfarg Riding School further south and the many Yorkshire sites that have been known since Manby’s work in the 1970s, and for the most part, they support his thesis. But between the Forth and Tyne, things are different. A new concept of the ‘domestic’, associated with sedentism does not seem to be the focus of Grooved Ware.

Much argument has been made regarding the scale of occupation in the Neolithic. Despite searching, no solid evidence of the Neolithic longhouses known from southern England have been found, nor the timber halls of southern Scotland. This has led many to argue that populations in the area might have been smaller and that Neolithic people lived in ephemeral, tent-like structures and maintained a more mobile, hunter/gatherer-like existence later than in other areas (Waddington 2006). In this perspective, it is not until the use of Grooved Ware that this changes and people move into unenclosed platform settlements at the end of the period. At Thirlings, Neolithic pottery was found in association with nearly 200 pits across the site (Miket et al. 2008). Of these, several alignments of large timbers in L-shaped configurations were discerned that are thought to be contemporary, but were ruled out as structural because of the shape of their alignment. Just to the north at 3 Whitton Park, a similar set of pits associated with coarseware pottery were found in the same alignment and this was described as a temporary structure (Waddington 2006, 17). Waddington (2006, 17-8) draws parallels to a similar structure at the Early Neolithic site of Bolam Lake, Northumberland and the finds at Thirlings, and suggests, although cautiously, that, “...the occurrence of triangular and trapezoidal timber-framed structures” may have been used over the centuries of the Neolithic in this region. In contrast to this are the more substantial

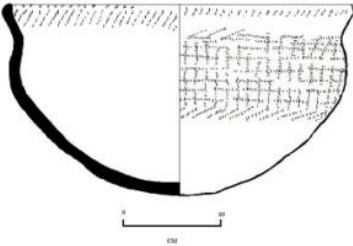
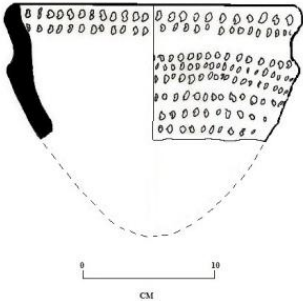
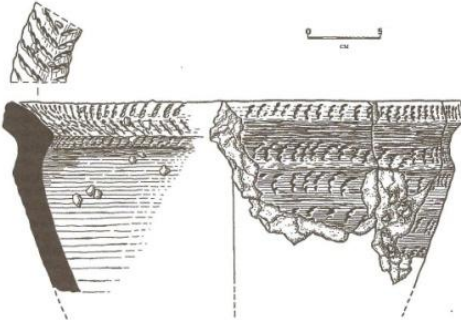
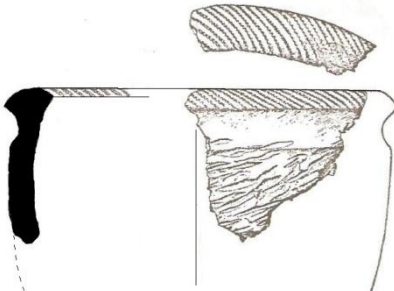
unenclosed platform settlements that appear to begin suddenly in the latter 3rd and early 2nd millennia BC and the demarcation of land by the greater number of Bronze Age burials that contain Food Vessels and Beakers.

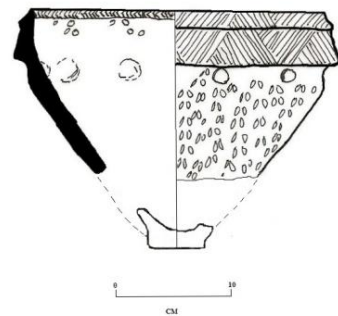
These remains may not be as true to past activity as it seems. The sites at which the sets of pits were found are in a region that has suffered great rates of erosion, particularly since the Milfield Basin was drained in the 19th century, and deep ploughing since the 1960s. This has truncated most of the features so that only the bottoms of the deepest pits remained as the smaller post pits, hearths and stake holes were destroyed. What this suggests is that the L-shaped configurations could be the deepest pits that held the largest timbers for roof support to substantially sized structures, which could have been any shape, rectangular or round. It is particularly important that at Thirlings the configurations of L-shapes are separate from one another and, of the 200 pits that remain from the Early, Middle and Late Neolithic, none of the pits cuts any other, indicating that, over the centuries that Thirlings was inhabited, the people who dug the subsequent holes must have had knowledge of the whereabouts of the previous ones. An obvious reason for this would be that they held posts for structures. If this is the case, this suggests that people in this region did construct substantial structures as early as the Early Neolithic and that this persisted over many centuries unbroken. The nature of these structures need not have been the same over all of this time, and it is probable that other types of structures were built as well, but what is significant is that this would mean that the construction of platform settlements after this may not have been as dramatic a change in lifestyle as has been suggested.

Grooved Ware in the study area is associated with all types of sites in the mid-late 3rd millennium: domestic (used for food processing), funerary (for feasting associated with an Early Neolithic long mound) and within boundary markers (as good post packing or to symbolise something important to the people who formed that boundary). The smashed pottery that contained heavy residues that was found associated with the long mound at Eweford West, demonstrates activities that focused on the importance of the monument and the dead who had been buried there since the Early Neolithic (McGregor & Stuart 2008: 84). It is not to say that new ideas and practices did not accompany the ceramics (it is probable that they did and this is one way culture changed over time) but just as new pots do not necessarily equal new people, a change in ceramics does not necessarily mean that everything else altered as well.

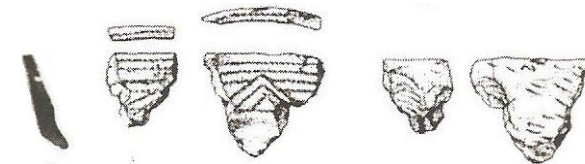
What appears to be the case in the Tyne-Forth region is that Grooved Ware does not represent a break with tradition, but it becomes a tool with which to elaborate on connections to the past and to continue tradition amidst new ideas entering the region. The arrival of Grooved Ware seems to be part of a longer tradition of inter-regional contact in which new ideas were adopted in ways that suited local people. It is probable that the Neolithic groups in the Tyne-Forth region were constantly exposed to new things brought through the contacts they had had for generations. The evidence for the study area is very much one where smaller aspects of culture changed amidst a backdrop of continuity from the Early Neolithic to the Bronze Age. Impressed Ware and Grooved Ware overlap at their extreme chronological ends and, although Grooved Ware is a very different type of pottery tradition than Impressed Ware or the Bronze Age wares that bear closer similarity to Impressed pots, the same sites continued to be used, activities focused on the same monuments and residues on the pots show that the same foods were eaten. Although the pottery shows that the national Grooved Ware substyles are consistent across the region, the same can be said for Impressed Ware in this area, where the Mortlake and Fengate styles were both made. Just as local versions of Mortlake were developed, local uses for Grooved Ware were developed to fit into the existing culture (Table 6.1). So, although the pots changed dramatically, the lifeways do not seem to have altered to the same degree. Thomas' arguments are supported by the evidence found at Durrington Walls and Stonehenge and it is compelling that similar structures are found there as those associated with Grooved Ware in Orkney, but if Grooved Ware moved across Britain to link these two with an ideology that would change the way people lived and how they interacted in their environment, then it seems that it did not take hold in the Tyne-Forth region in the same way.

Table 6.1: Examples of the national styles of Neolithic ceramics from the Impressed Ware and Grooved Ware traditions, compared to those found in the Tyne-Forth region.

Impressed Ware	National Style	Tyne-Forth Region
	<div></div> <p>Ebbsfleet style, from Windmill Hill, Wiltshire (redrawn from Gibson & Woods 1997: 225)</p> <div></div> <p>Mortlake style, from West Kennet, Wiltshire (redrawn from Gibson & Woods 1997: 225)</p>	<div></div> <p>Meldon Bridge style (from Speak & Burgess 1999: 63)</p> <div></div> <p>Ford style (from Longworth 1969: 259)</p>

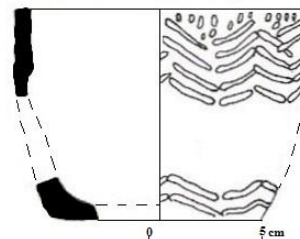


Fengate style, from West Kennet, Wiltshire
(redrawn from Gibson & Woods 1997: 225)

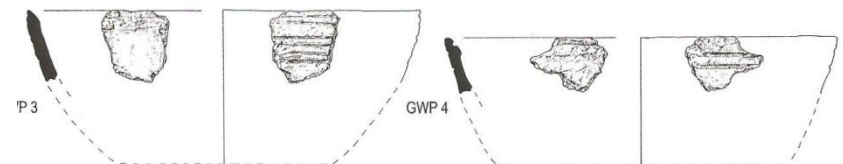


Fengate style from Thirlings, Northumberland (from Miket et al. 2008)

Grooved Ware

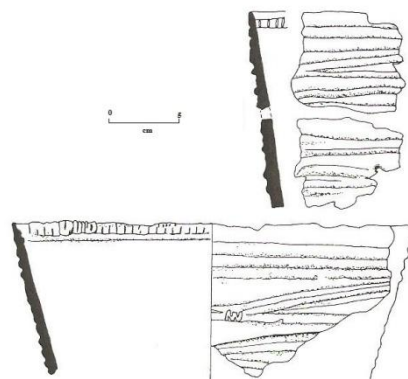


Clacton style, from Corporation Farm, Upper

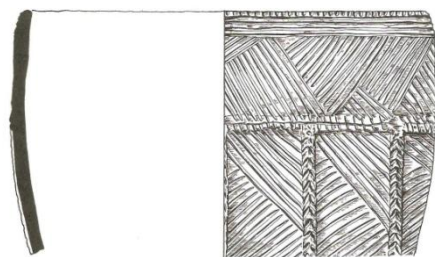


Eweford, East Lothian (from MacGregor & Stuart 2007: 74)

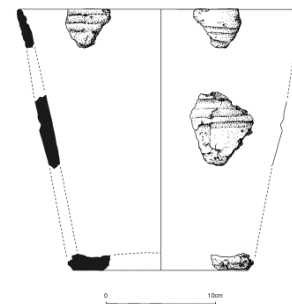
Thames (from Barclay 1999: 11)



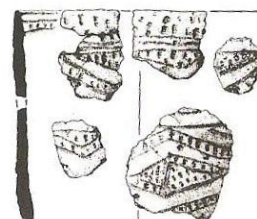
Woodlands style, from Sutton Courtney and Radley, Upper Thames (from Barclay 1999: 11)



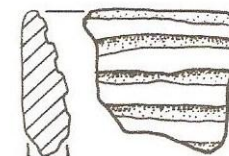
Durrington Walls style, from Durrington Walls, Wiltshire (from Wainwright & Longworth 1971: 76)



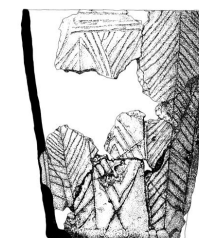
Cheviot Quarry, Northumberland (from Millson et al. 2012)



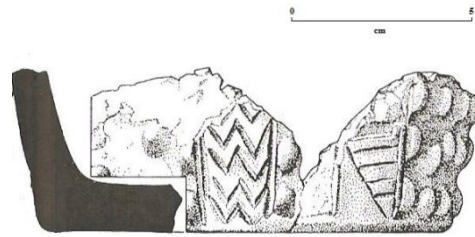
Lanton Quarry, Northumberland (from Johnson & Waddington 2008: 118)



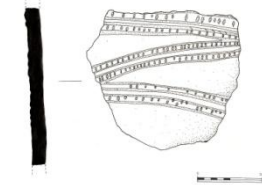
Lamb's Nursery, Midlothian (from Cook 2000: 104)



Lanton Quarry, Northumberland (from Johnson & Waddington 2008)



Rinyo style, from Skara Brae, Orkney (from Clarke 1976: 12)



Yeavinger,
Northumberland
(from Millson et al.
2012)

Beaker

Beakers have been found at more than the 83 sites listed on Map 6.3, but these are the vessels for which a provenance could be conclusively ascertained. Of the group presented, 97 vessels were examined from 61 sites. The Beakers fit into phases 1, 2 and 3, outlined by Needham (2005), but most fit his middle phase around and after the ‘fission horizon’, which he dates to c. 2250-1950 cal BC (Needham 2005). Nearly all of the sites are funerary, but exceptions to this are at the deposits found at: Ross Links (Northumberland); Seahouses (Northumberland); Hedderwick (East Lothian) and Archerfield (East Lothian), all of which appear to be domestic. Beaker material was also found at the domestic sites of Lanton Quarry and Cheviot Quarry (Northumberland). The Beaker material from these domestic sites are from Beakers from Needham’s first phase and are decorated mostly as AOC or AOComb styles, although later styles were present at Hedderwick, Archerfield and Ross Links. In Needham’s secondary and tertiary phases, the domestic sites did not contain Beaker pottery, but rather, had a mixture of ceramics that have mixed characteristics, influenced by the Neolithic traditions, contemporary to Beakers and Food Vessels.

Many of the early Beakers were found at sites that were previously used in the Neolithic period and it is with the Beakers that they become funerary monuments and ‘close’ in the sense described by Bradley (1998). At Cairnpapple (West Lothian), the henge is ‘closed’ when it is filled in with cairns that contain graves (Piggott 1947-8; 88), both of which have Beakers of early style with ‘low’ and ‘weak’ carinations (Needham 2005). Similarly, AOC sherds were found in association with the final phases of the large stone enclosure at Blackhouse Burn (Lanarkshire) (Lelong & Pollard 1998), and at Cloburn Quarry (Lanarkshire), AOC Beaker sherds were found in the red chip layer phase of the monument when the stone circle was filled in and burials were first placed within it (Lelong & Pollard 1998). It is also with early Beakers that burials begin to be placed within mounds, many of which were subsequently used for burials until the Collared Urn period came to a close in the Middle Bronze Age: at Drumelzier (Peeblesshire), Harehope Cairn (Peeblesshire), Camphouse Farm (Roxburghshire) and Chatton Sandyford (Northumberland).

The period in which Beakers were used in the region spans c. 2400-1900 cal BC and through this time the style of the vessels does change, but generalisations can be made for the tradition in the region in comparison to earlier and later types of prehistoric pottery. The Beakers tend to have thin walls, ranging from 4 mm to 10 mm and there is a very consistent

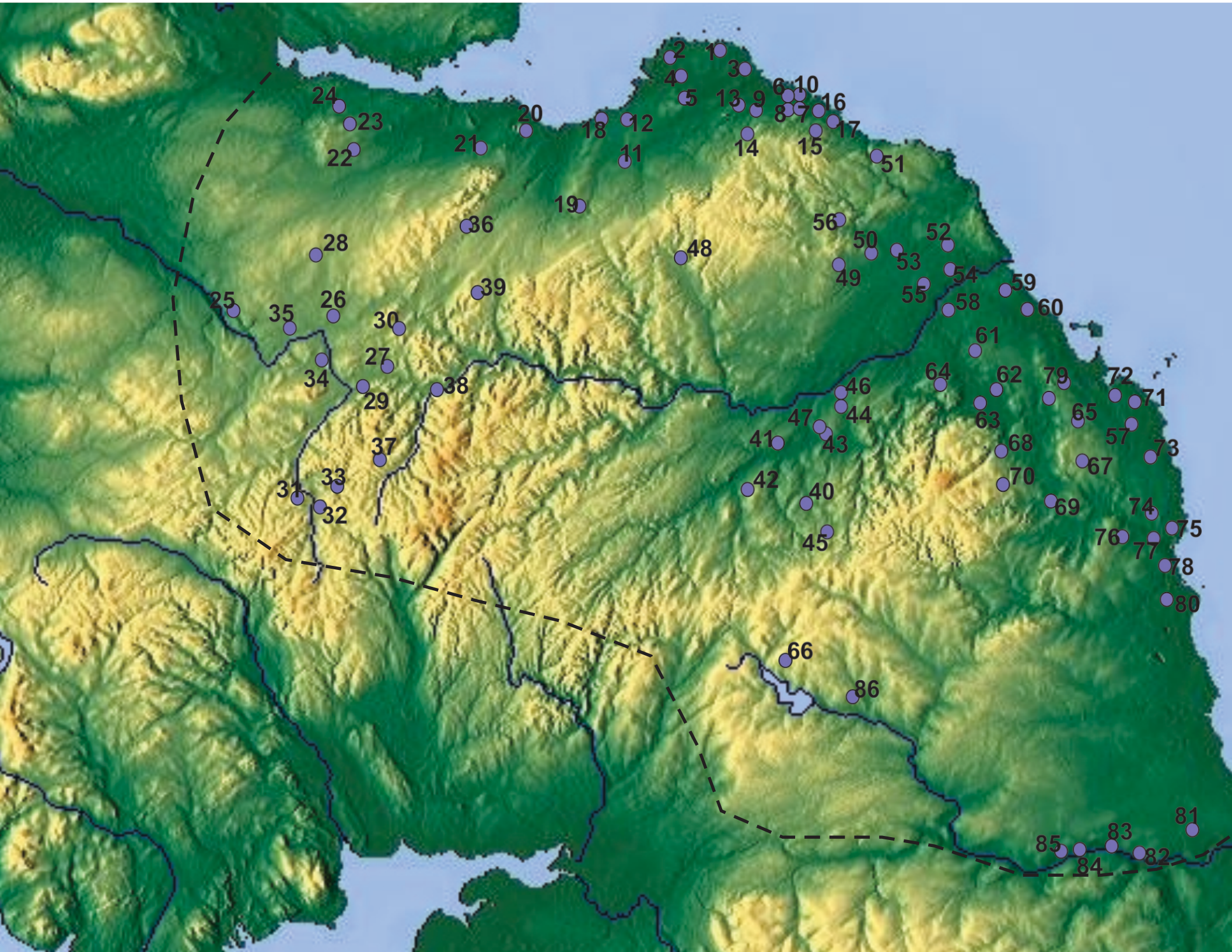
Map 6.3: Beaker Sites

1. West Links, North Berwick Law, East Lothian.
2. Archerfield, Gullane, East Lothian
3. Hedderwick, Dunbar, East Lothian
4. Drem, West Fenton, East Lothian
5. Drem, Haddington, East Lothian
6. Kirkhill Braes, Dunbar, East Lothian
7. West Pinkerton, Dunbar, East Lothian
8. Broxmough Waird, Oxwell Mains, Dunbar, East Lothian
9. Eweford, East Lothian
10. East Barns, East Lothian
11. Windy Mains, East Lothian
12. Longniddry, Boglehillwood, East Lothian
13. Ruchlaw Mains, Stenton, East Lothian
14. Nunraw, Garvald, East Lothian
15. Thornton, Innerwick, East Lothian
16. Thurston Mains, Innerwick, East Lothian
17. Skateraw, Innerwick, East Lothian
18. Seton, East Lothian
19. Borthwick, Cakemuir Hill, Midlothian
20. Craigentinny, Edinburgh, Midlothian
21. Juniper Green, Edinburgh, Midlothian
22. Bathgate, Edinburgh, Midlothian
23. Cairnpapple, Torphichen, West Lothian
24. Tartravan, Linlithgow, West Lothian
25. Mossplat, Carluke, Lanarkshire
26. West Yards, Carnwath, Lanarkshire
27. Drowsy Brae, Shieldhill, Lanarkshire
28. Cairny, Lanarkshire
29. Blackhouse Burn, Lanarkshire
30. Newbiggingmill Quarry, Lanarkshire

31. Crawford, Lanarkshire
32. Boatbridge Quarry, Thankerton, Lanarkshire
33. Stoneyburn Farm, Crawford, Lanarkshire
34. Cloburn Quarry, Cairngryffe, Lanarkshire
35. Lanarkmoor, Lanarkshire
36. West Water Reservoir, (West Linton), Peeblesshire
37. Oliver, Tweedsmuir, Peeblesshire
38. Drumelzier, Peeblesshire
39. Harehope Cairn, Peeblesshire
40. Camphouse Farm, Edgerston, Roxburghshire
41. Lanton Mains, Jedburgh, Roxburghshire
42. Bedrule, Jedburgh, Roxburghshire
43. Wester Wooden, Eckford, Roxburghshire
44. Eckford, Roxburghshire
45. Knock Hills, Edgerston, Roxburghshire
46. Littleton Castle, Kelso, Roxburghshire
47. Springwood, Kelso, Roxburghshire
48. Lauder Hill House, Berwickshire
49. Cadger's Cairn, Gordon Moss, Berwickshire
50. Macksmill, Gordon, Berwickshire
51. Hoprig, Cockburnspath, Berwickshire
52. The Duns, Grueldykes, Berwickshire
53. Manderston, Berwickshire
54. Doon's Law, Leetside, Whitsome, Berwickshire
55. Broomdykes, Edrom, Berwickshire
56. Harehaw Hill, Chirnside, Berwickshire
57. Pace Hill, Northumberland
58. Grindon, Norham, Northumberland
59. Scremerston, Northumberland

60. Ross Links, Northumberland
61. Ford, Northumberland
62. Cheviot Quarry, Milfield, Northumberland
63. Lanton Quarry, Milfield, Northumberland
64. Twizell, Belford, Northumberland
65. Fowbury, Chatton, Northumberland
66. Smalesmouth, Northumberland
67. Rosebrough, Northumberland
68. Lilburn Hill, Northumberland
69. West Lilburn, Northumberland
70. Ilderton, Northumberland
71. Seahouses, Northumberland
72. Bamburgh, Northumberland
73. Chatton Sandyford, Northumberland
74. Rock, Ellsnook Wood, Northumberland
75. Ratcheugh, Alnwick, Northumberland
76. Shipley, Alnwick, Northumberland
77. High Buston, Northumberland
78. Hawkshill, Lesbury, Northumberland
79. North Hazelrigg, Northumberland
80. Amble, Northumberland
81. Horton Castle, Northumberland
82. Dilston Park, Corbridge, Northumberland
83. West Wharmley, Hexham, Northumberland
84. Altonside, Haydon Bridge, Northumberland
85. Plenmellor Common, Haltwhistle, Northumberland
86. The Sneep, North Tynedale, Northumberland

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD



thickness to the walls of 7-8 mm through all three phases. The rims are typically simple and outward-bending with a flattened or rounded rim top. The walls then curve in to a narrower neck and then out to a belly carination and finally to a flat or slightly concave base. Inside, the transition from wall to base is abrupt and there are many examples where the transition was purposely moulded until a raised boss or 'cone' was in the centre of the base. The vessels range in height from 110 mm to 210 mm, but most are on the latter end of this and are 180-210 mm tall. The rim diameter of the Beakers ranges from 85-170 mm, whilst the base can be as small as 59 mm or as large as 135 mm; however, there is a strong consistency in vessel size and most range from 125-150 mm wide at the rim and 70-90 mm wide at the base. In addition, the width of the vessel at the belly is consistently between 120-130 mm. This creates a form that bends sinuously over a symmetrical form from rim to base.

Most of the vessels have a gritty texture with lithic inclusions; however, the fabric is strikingly different from the other traditions as most of these lithic inclusions have been prepared by crushing. This is visibly different from the Neolithic or Bronze Age inclusions since they have shorter, angular edges and an irregular form, rather than elongated, angular edges and consistent elongated forms. The inclusions are consistently small (1-3 mm) and medium (3-5 mm) in size. They tend to be dark grey and black lithic material, but light grey and white lithics are typical as well, and in some instances, mica has been added, which creates a black, sparkly surface. It is uncertain if this was done purposely or if the mica was naturally part of a granite temper. Indeed, it is probable that the slips typical of Beakers would have covered much of the mica's texture. Rounded, natural gravel and sand are also common, which suggests a preference for sandy or gritty clay. Grog was noted at Gryndan (Northumberland); Ford (Northumberland); Drumelzier (Peeblesshire); Easter Wooden (Roxburghshire); Bedrule (Roxburghshire); West Pinkerton (East Lothian); Broxmouth Waird (East Lothian); and Hedderwick (East Lothian). Quartz crystal was observed in some of the sherds at Archerfield (East Lothian) and the spaces from burnt out organics were seen within sherds from Hedderwick (East Lothian); Archerfield (East Lothian); and Dilston Park (Northumberland). Most of the vessels have been slipped and there is evidence of an attempt to fire them to a pink hue as is thought to have been desired in Beakers; however, this seems to have been more often achieved in the earlier phase as the AOC beakers are more consistently red/pink in colour than later vessels.

The decorative style of the Beakers in the Tyne-Forth region is varied and, based on the few dates that are available, seem to follow Needham's (2005) view that the decorative styles

were largely contemporary rather than evolutionary. However, trends in motif combination and placement on the vessel are evident and there does appear to be a progression for Beakers within the wider set of ceramic traditions of the Late Neolithic and Early Bronze Age. The most commonly used element is comb, which is usually in motifs of cross-hatching, horizontal lines, short vertical and diagonal lines, chevrons, herringbone and concentric triangles and diamonds. Most of the vessels are decorated in 3-4 zones of decoration on the neck, belly and lower body and a feature that seems especially prevalent in this region is the use of metopes, or ‘feathering’, created by short diagonal lines, oval impressions or fingernail impressions, to border the zones (Figure 6.26). Panels of upright and inverted triangles that are filled with horizontal lines are also usual, and the use of fingernail impressions, grooving, incision and round-tip comb impressions are present. Some vessels are decorated in only two zones, which adhere to Needham’s (2005, 195-6) *long-necked* category in form and there are a few examples that are entirely decorated. Only one example from Cheviot Quarry, Northumberland is undecorated. What seems to be specific to this region is the use of horizontal lines to mark out the narrow part of the neck, a feature that was first observed by Clarke (1970) and Lanting & Van der Waals (1974) in their analyses (Figure 6.27).



Figure 6.26: The use of ‘feathering’ as a border element on Beakers.



Figure 6.27: An example of horizontal lines emphasizing the neck of a Beaker is found at Ruchlaw Mains, East Lothian (drawing from Ashmore et al. 1982).

Vessels of note include one of Canon Greenwell’s finds from Ford, Northumberland, which has a usual Beaker shape, with a mid-point carination, but the decoration consists of double rows of doughnut-shaped impressions in horizontal and vertical alignments that create a lattice (Figure 6.28). The only other use of this motif that could be found in the literature was

on a handled Food Vessel from Huntingdonshire. (Clarke 1970, 417; Figure 6.29), although it is used in the region on Early Bronze Age vessels, including Food Vessels and Collared Urns.

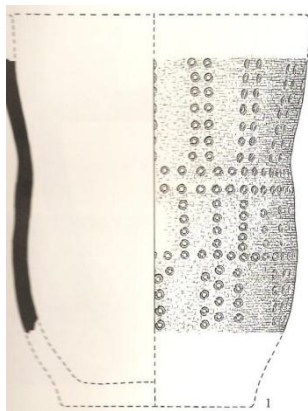


Figure 6.28: The decoration on this Beaker from Ford, Northumberland consists of a lattice of doughnut-shaped impressions, a motif only recognized at one other site in Clarke's (1970) corpus (illustration from Clarke 1970).

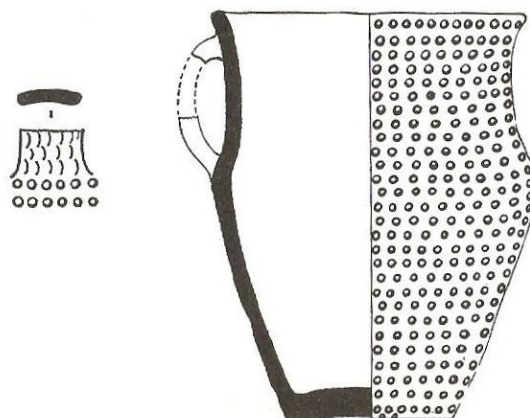


Figure 6.29: The Beaker from Huntingdonshire, illustrated by Clarke (1970: 417).

Also at Drem (West Fenton, East Lothian), a particularly well-made Beaker is decorated with vertically-set panels of herringbone and metopes (Figure 6.30).

Clarke (1970: 516) placed the Drem Beaker into his N_3 category, the most developed of the northern group, and it fits into Lanting & Van der Waals' Step 6 with its cylindrical shape, rounded belly and broad, banded decoration. More recently, Needham (2005: 193) has included this beaker in his Short-Necked (SN) group and has published an associated radiocarbon date of 2290-2195 cal BC. This pot is much more skilfully made than any other from any of these categories in the region. The decoration has previously been assumed to be abstract, but there are grounds for arguing that it is representative of cereal ears, most probably barley.

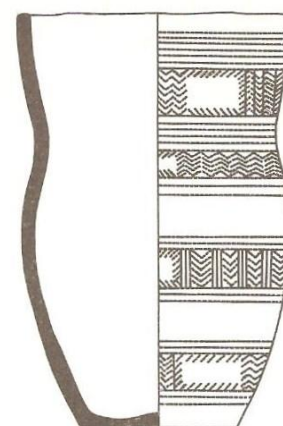
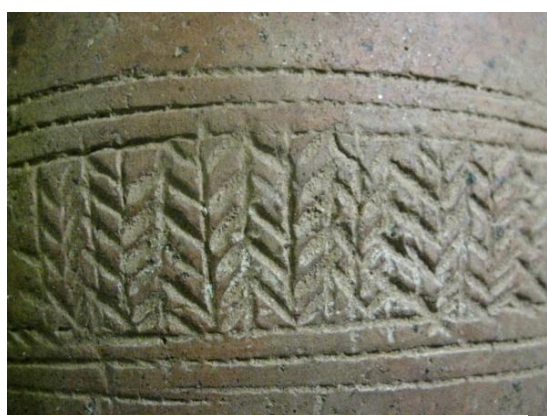


Figure 6.30: The Drem Beaker with metopes illustrated (from Clarke 1970).

The decoration on this pot is organised in three zones: the neck, belly and base. A rectangular-toothed comb, with 2mm wide teeth, and grooving were employed. It is the decoration on this vessel that is the point of interest here. In the initial report, Edwards (1943-4: 114-5) described it as a, ‘...metopic arrangement of stamped and sharply incised elements executed after the horizontal lines had been completed’. Clarke’s (1970: image 606) illustration demonstrates this also. Needham (2005: 193) summarises the ornament on the Drem Beaker in Table 4 as ‘three panelled zones, reserved zones, horizontals, multiple zigzags [and] vertical chevrons’. The first zone has three sets of horizontal rows of comb and the resulting two blank panels are further split into vertical panels of differing decoration. This includes a rectangular motif whereby the edges of the rectangle are feathered with short, diagonal lines, a rectangular panel that is filled with zigzag patterns grooved in, and a vine pattern made from opposing, vertical rows of incised herringbone. The second zone is of particular interest. Here, the horizontal rows of comb form upper and lower borders to a series of vertical panels that repeat the feathered rectangles of the neck, but also sections where vertical lines are met with grooved diagonal lines. This forms the background to the false relief, or deep incision, of what appears to be a row of cereal ears. Detailed photos above were shown to archaeobotanists, Prof. Peter Rowley-Conwy, Dr. Mike Church and Ms. Rosie Bishop, and they confirmed that, based on the shape and spacing of the grains on the ears, the images on the vessel could be 2-row barley or emmer wheat. However, considering that barley dominates cereal assemblages on Neolithic- and Beaker-aged sites in the Tyne-Forth region, it is most probable that 2-row naked barley is depicted on the vessel’s surface rather than emmer wheat (Figure 6.31) (Bishop et al. 2009; Jones & Rowley-Conwy 2007; Hall & Huntley 2007: 29-31). The base zone completes the design with horizontal lines of comb for borders and abstract of zigzags, herringbone and lozenge shapes.



When this pot was described by Edwards, the decoration was described as geometric and the patterns discussed here were seen as vertically-placed herringbone.

Figure 6.31: A photograph of the motifs on the Drem Beaker and an ear of six-row barley show the similarity of the features, including elongated ‘stems’ of the barley ear that extend beyond the top border of the panel and the curvature and shape of the seeds on either side, which suggests this motif may be more representative.

Indeed, if the focus is on the part that has been impressed, it appears to be so, but this pot has been made in such a way that the impressions are not the motif, they are the background. By cutting out these areas, the relief of a scene this potter was familiar with, that of ears of barley, is revealed. Parallels for this type of decoration were not found on other Beakers from the Tyne-Forth region that were examined and a close examination of the vessels illustrated in Clarke's corpus is similarly unproductive. This is clearly a unique and especially skilfully-made example of the tradition and it is a pot that provides a rare glimpse into the world of the people who made Beakers.

It is equally uncommon to find vessels that record instances of learning from any of the traditions, but NMS X.EG 14 from Drem (Haddington, East Lothian), appears to have traces from a novice learning how to decorate a pot (Figure 6.32). The vessel itself is crudely made. It is asymmetrical, has uneven and thick walls; its form mirrors that of a Beaker, but without the fluid curves of one that is well-made. Despite this, the decoration on one side of the vessel is expertly done in a very typical pattern for the tradition (Figure 6.33). Consistent horizontal lines create panels that are infilled with rows of short, diagonal lines and there is feathering at the bottom border. On the other side of the vessel, the blank area below this panel is disrupted by scattered rows of fingernail impressions (Figure 6.34). Below this on the bottom zone, the upper panel is repeated with the same consistency and skill, but halfway around the vessel, it changes to more haphazard opposing diagonal lines that have been grooved in varying depths (Figure 6.35). What



Figure 6.32: Beaker NMS X.EG 14 from Drem, Haddington, East Lothian.

transpires from this is an image of a more experienced potter teaching a novice how to make a Beaker and how to decorate it. The crude nature of the vessel cannot simply be explained by a deteriorating tradition (Clarke 1970; Lanting & Van der Waals 1974), nor can it simply be placed in a heterogeneous class of *weak-carinated* form (Needham 2005, 188-190), because its decoration clearly demonstrates the hands of two people.



Figure 6.33: The decoration on this Beaker is done according to tradition on one side.



Figure 6.34: But on the other side of the same Beaker the decoration changes and is less well-executed.



Figure 6.35: The decoration on other parts of the pot similarly change and demonstrate different patterns co-existing on the pot.

At Easter Wooden (Roxburghshire), a *long-necked* beaker was found, which displays typical motifs of parallel, diagonal lines in comb that form triangles with horizontal line infill. Rather than in zones, this vessel is entirely decorated but this is not entirely uncommon in Beakers. What is rare about this pot is that it is decorated with grooved chevrons and diagonal lines on its base, which is more akin to the Food Vessel tradition (Winning 1891, 29; Figure 6.36).

The collection of Beakers from the Tyne-Forth region, overall, follow a general tradition that fits into what is known for Beakers nationally,



Figure 6.36: The base of the Beaker from Easter Wooden, Roxburghshire.

but within this, and at a more detailed level, they demonstrate individuality as they are varied in their combinations of form, use and placement of motifs. Parallels within the region are, thus, important and so the striking similarity of the decoration on NMS X.EG 74 from Thornton (Innerwick, East Lothian) and NMS X.EG 93 at Kirkhill Braes (East Lothian) (Figure 6.37 and Figure 6.38) is exciting. On both vessels, the same motifs have been placed in almost the same locations on the pot. By Needham's (2005) definition, they fit separate categories (and time periods) with the Kirkhill Braes vessel demonstrating a *low-carination*, whilst the Thornton pot has its carination closer to the midpoint of the vessel; however, both have upper and lower zones defined by horizontal comb lines and panels of round-toothed comb. They differ in that there is cross-hatching just above the base at Kirkhill Braes and triangles at the base at Thornton, but otherwise they show strong similarity. Considering the proximity of the finds, this should not come as a surprise and it is possible that despite the location of their carination, their similarity may indicate that they were made around the same time. This is strengthened by pot 1 at Eweford, which is also an early Beaker site within a similar distance that is described to have a comparable decorative scheme (Figure 6.39).

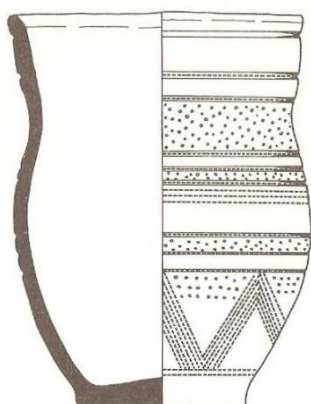


Figure 6.37: NMS X.EG 74 from Thornton, Innerwick, East Lothian (from Clarke 1970).

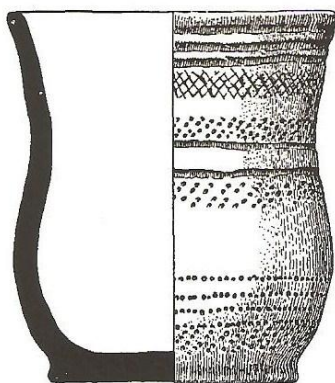


Figure 6.38: NMS X.EG 93 from Kirkhill Braes, East Lothian (from Clarke 1970).

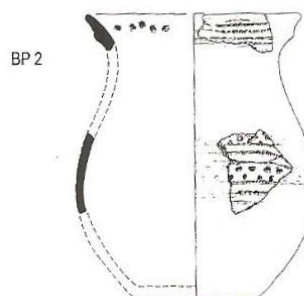


Figure 6.39: BP2 from Eweford, East Lothian (from MacGregor & Stuart 2007, 90)

It is at this point that it would seem pertinent to discuss the overall trends of Beakers in the Tyne-Forth region; however, the period of 2400-1900 cal BC was more ceramically complicated than earlier or later eras. Beakers were a foreign tradition that were adopted in a region that already had its own pottery and the radiocarbon dates illustrate that Food Vessels were taken up shortly after Beakers and co-existed for a significant period. It is the selection and use of certain pots over others and varying ways in which they were used that can tell us

how this transpired. Thus, this other tradition must be introduced before a discussion of regional trends in this period can be addressed.

Food Vessels

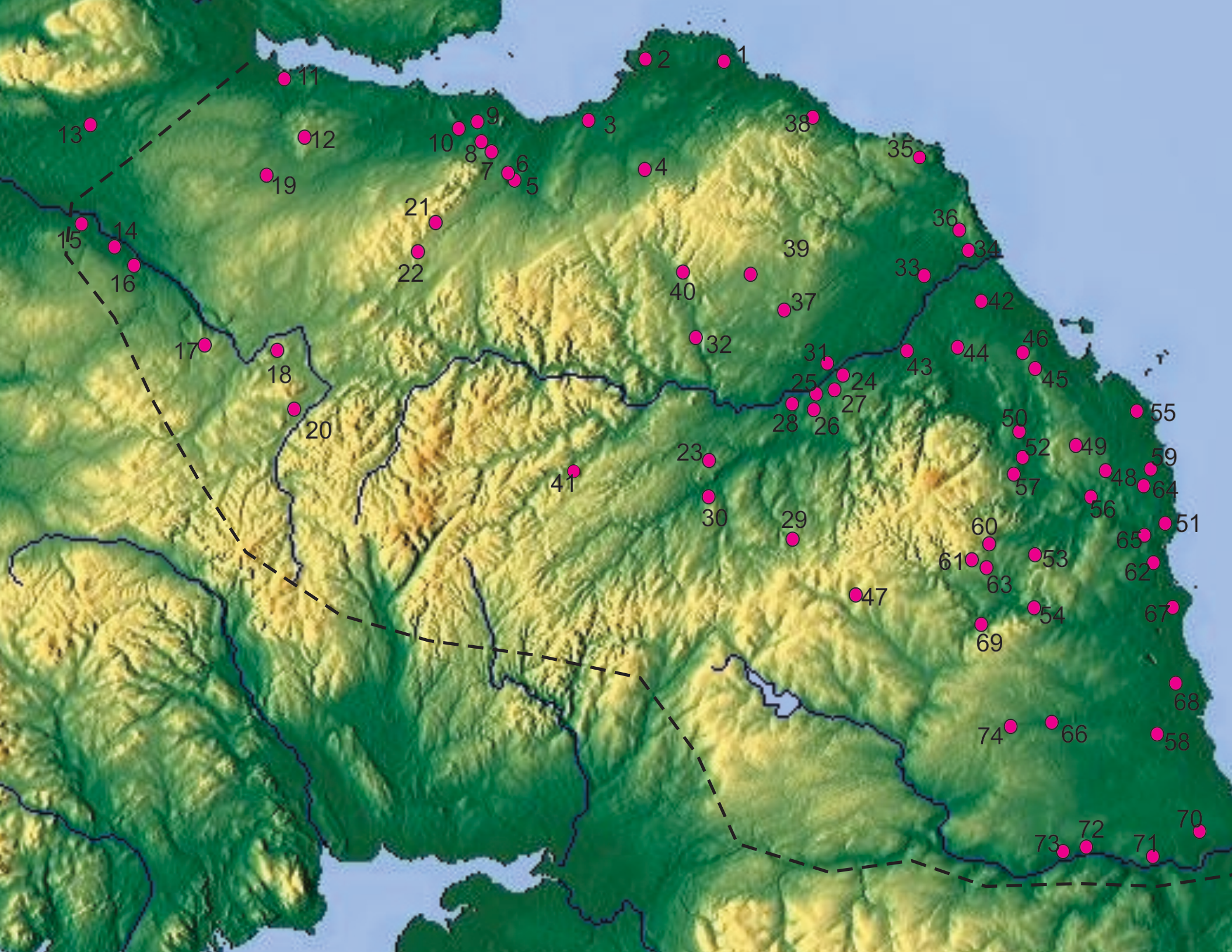
The literature records 75 sites where Food Vessels were found (Map 6.4). Of these, 54 Food Vessels were examined from 43 sites. All of the sites are funerary and most consist of cremations found buried in cists, although many were in pits without cists, either as flat graves or within mounds. Inhumation burials were found with Food Vessels at West Water Reservoir (Peeblesshire); Sunlaws (Roxburghshire); Ferniegair (Lanarkshire); Doddington (Northumberland); Dour Hill (Northumberland); Rothbury (Northumberland), Howick Heugh (Northumberland) and Villa Real (Jesmond, Tyne & Wear). Contemporary domestic sites are known in the earliest phases of Lintshie Gutter (Lanarkshire); Green Knowe (Peeblesshire), and Standrop Rigg and Lookout Plantation (Northumberland) and Burgess' (1995) discussion of the pottery found at these sites has been taken into account in this study since the sherds themselves were not available for examination. Radiocarbon dates for Food Vessels in this region place them in a time span that is roughly contemporary with Beakers, but lasting a century longer, c. 2200 – 1800 cal BC. Two dates, from Milfield North Henge (HAR-1199) and Well House Farm (Gu-1340) both begin in the 25th century BC, but both of these were taken from unidentified charcoal and are, therefore, unreliable. It is important to note, though, that a third date, from Turf Knowe (AA-46486), that was AMS-dated from cremated bone found in the associated Food Vessel, also yielded an early date, beginning at 2470 cal BC.

All of the forms presented by Gibson & Woods (1997, 161) and Gibson (2002) are represented in the Food Vessels from the entire Tyne-Forth region, but bipartite and tripartite vases and bowls are most common. Yorkshire Vases, many of which have ridge stops in the shoulder bevel that are either perforated, or unperforated are also prevalent. Globular British Bowls were found at Villa Real (Tyne & Wear) and at Heighton Mill (Kelso, Roxburghshire) and one Ridged Vase was examined from Newton (Corbridge, Northumberland). A form that

Map 6.4: Food Vessels

1. Hedderwick, Dunbar, East Lothian
2. Luffness, Longniddry, East Lothian
3. Winton Park, Cockenzie, Midlothian
4. Costerton Mains Farm, Blackshiels, Midlothian
5. Bonnyrigg, Dobbie's Knowe, Lasswade, Midlothian
6. Parkburn sandpit, Lasswade, Midlothian
7. Fairmilehead, Edinburgh, Midlothian
8. Merchiston Cemetery, Edinburgh, Midlothian
9. North Gyle, Edinburgh, Midlothian
10. Juniper Green, Edinburgh, Midlothian
11. Bridgeness, Bo'ness, West Lothian
12. Cairnpapple, Torphichen, West Lothian
13. Cadder, Bishopbriggs, Lanarkshire
14. Ferniegair, Hamilton, Lanarkshire
15. Drumshargard, Cambuslang, Lanarkshire
16. Patrickholm sandpit, Larkhall, Lanarkshire
17. Hero's Cairn, Swaitheshill, Lanarkshire
18. Sherifflats, Thankerton, Lanarkshire
19. Cairny, Lanarkshire
20. Cloburn Quarry, Cairngryffe, Lanarkshire
21. West Water Reservoir, West Linton, Peeblesshire
22. Darn Hall, Peeblesshire
23. Ancrum Moor, Roxburghshire
24. Redden Farm, Sprouston, Roxburghshire
25. Yetholm, Kelso, Roxburghshire
26. Morebattle, Otterburn, Roxburghshire.
27. Kalemouth Cairn, Roxburghshire
28. Sunlaws, Roxburghshire
29. Camphouse Farm, Edgerston, Roxburghshire
30. Roxburghshire?
31. Heiton Mill, Kelso, Roxburghshire
32. Longcroft, Lauderdale, Berwickshire
33. Edington Mill, Chirnside, Berwickshire
34. Hagg Wood, Foulden, Berwickshire
35. Earnsheugh, Coldingham, Berwickshire
36. High Cocklaw, Berwickshire
37. Cadger's Cairn, Gordon Moss, Berwickshire
38. Hoprig, Cockburnspath, Berwickshire
39. Todwell House, Halyburton Farm, Berwickshire
40. Lauder, Hill house, Berwickshire
41. Yarrow Kirk, Selkirkshire
42. Murton Farm, Berwick-upon-Tweed, Northumberland
43. Cornhill, Northumberland
44. Ford, Northumberland
45. Doddington, Northumberland
46. Kyloe, Northumberland
47. Dour Hill, Northumberland
48. Cheviot Walk Wood, Eglingham, Northumberland
49. Blawearie, Eglingham, Northumberland
50. Haughhead, Wooler, Northumberland
51. Hawkshill, Lesbury, Northumberland
52. West Lilburn, Northumberland
53. Rothbury, Northumberland
54. Spindleston, Northumberland
55. Simonside Hills, Northumberland
56. Harehope Moor, Eglingham, Northumberland
57. Roddam, Northumberland
58. Chatton Sandyford, Northumberland
59. Howick Heugh, Northumberland
60. Holystone Common, Alwinton, Northumberland
61. Harbottle Peels, Alwinton, Northumberland
62. High Buston, Alnwick, Northumberland
63. Castle Hill, Callaly, Northumberland
64. South Charlton, Northumberland
65. Ratcheugh, Alnwick, Northumberland
66. Warksworth, near Wark, Northumberland
67. Amble Quarry, Northumberland
68. Ashington, Northumberland
69. Harehaugh, Morpeth, Northumberland
70. Villa Real, Jesmond, Tyne & Wear
71. Broomhill, High Mickley, Northumberland
72. Well House Farm, Newton, Corbridge, Northumberland
73. Huntlaw, Hexham, Northumberland
74. Colwell, Hexham, Northumberland
75. The Fawns, Kirkwhelpingham, Northumberland

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD.



is not discussed that is found at several sites in the region (Castle Hill (Callaly, Northumberland); Kirkpark (Musselburgh) and Bonnyrigg (both Midlothian); Sheriff-flats (Lanarkshire); Darn Hall and West Water Reservoir (both Peeblesshire)) has a simple rim and rounded, elongated body that leads to a flat base. These are sometimes referred to as bucket-shaped Food Vessels. It has its closest similarities to Globular British Bowls or Bipartite vases, but more elongated in the former and without the defined neck in the latter.

The rim tops are flattened or insloping and overhang the inside of the vessel. The walls are consistent in thickness across single pots and range in the tradition from 9-25 mm thick, although a huge majority are 10 mm thick. The vessels are 70 mm to 170 mm tall, but there is a very consistent trend for pots to be 120 -140 mm tall. Rim diameters range from 85-175 mm and base diameters are 30-118 mm, but most pots are 140-150 mm across at the rim and 70-90 mm in diameter at the base. All of the bases are flat or slightly concave and the internal transition from wall to base is usually gradual; in some cases, this is so extreme that the base is concave and rounded inside.

The fabric of the Food Vessels is characteristically coarse with textures that are gritty, very gritty and extremely gritty. This follows the types of fabrics used in Early Bronze Age pottery, but it is important with Food Vessels because, unlike Collared Urns, Cordoned Urns or Vase Urns, this increase in the use of lithic inclusions cannot be explained by the increased size of the vessel. Even in comparison to Impressed Ware, Food Vessel fabric differs because there are very few examples of clay-rich or sandy fabrics: Food Vessels are simply much more consistent in texture and the materials that were used to create them demonstrates a manufacturing choice on behalf of the potters. The fabrics tend to have very little natural lithic inclusion and the inclusions are prepared. They tend to be dark grey and black, as with Beakers, and white, light grey, red and brown. Very few examples of grog, calcite, burnt out organics and quartz were also noted. Most of these inclusions are medium-sized (3-5 mm), which is smaller than the inclusions used in the later urn traditions (where vessels were larger) and they are larger than with Beakers.

Nearly all of the Food Vessels are slipped with a very heavy cover and show striations from wiping to smooth the surfaces. All are decorated to some extent and most have extensive ornament that covers every part of the pot. The only exceptions to this rule are at Dour Hill (Northumberland), where only the rim top and edge are decorated; Sheriff-flats (Lanarkshire), where only cordons are used at the ridges; and at Kirkpark (Midlothian) where

decoration is only under the rim; however, it is possible that these vessels may be of later date and have been influenced by the urn traditions. The elements used include: twisted, whipped and plaited cord, stab-and-drag impressions, fingernail impressions, slashes, stab marks and comb impression and these were combined in patterns of: zigzag, herringbone and chevron patterns, opposing panels of horizontal and diagonal lines, particularly on the lower body of the pot, and false relief of zigzag or diamonds.

Decoration on the rim top and rim edge varies, but horizontal lines, herringbone, false relief with cord lines as borders, zigzag and plaited cord are common. It appears that the pattern on the rim top was usually chosen to complement the decoration on the body of the vessel and patterns tend to repeat in the bevels and on the walls to the base. Horizontal lines and herringbone are particularly common on the body of Food Vessels and this is often contrasted with rows of vertical lines on the ridges in between. In some cases, the bottom of the pot is also decorated. Most common is a simple cross with a border, such as at Newton (Corbridge, Northumberland) (Figure 6.40), but sometimes the base only has a border, as at Luffness (East Lothian), or more complicated patterns, such as the radiating star on the base of the Food Vessel from Patrickholm Sand pit (Lanarkshire) (Figure 6.41). All of these are known in the Food Vessel tradition nationally (Manby 2004). Most of the decoration is confidently



Figure 6.40: Base of Food Vessel from Newton, Corbridge, Northumberland.



Figure 6.41: Base of Food Vessel from Patrickholm sand pit, Lanarkshire.

executed with even depth and symmetry.

Vessels that deviate from these trends are at Castle Hill (Callaly, Northumberland), where curvilinear lines are placed in pairs around the vessel from rim to base (Figure 6.42). Also at Edington Mill (Chirnside, Berwickshire), rows of twisted cord have been focused on the ridge stops in the shoulder bevel so that they appear to ‘drape’ from them, similar to cloth. At Patrickholm Sand pit (Lanarkshire), a chequerboard pattern was impressed using comb on the rim top and on the upper half of the vessel with fingernail impressions on the ridges between the bevels. Below this are panels of zigzags, herringbone, short vertical lines and converging diagonal lines (Figure 6.43). On the base is the radiating star mentioned in the previous paragraph. Finally, at Darn Hall (Peeblesshire), multiple rows of comb were used to create the false relief of a zigzag, under which vertical panels of alternating vertical and diagonal lines of comb create a vertically ridged form to the pot (Figure 6.44).



Figure 6.42: Food Vessel from Castle Hill, Callaly, Northumberland.



Figure 6.43: Food Vessel from Patrickholm sand pit, Lanarkshire.



Figure 6.44: Food Vessel from Darn Hall, Peeblesshire.

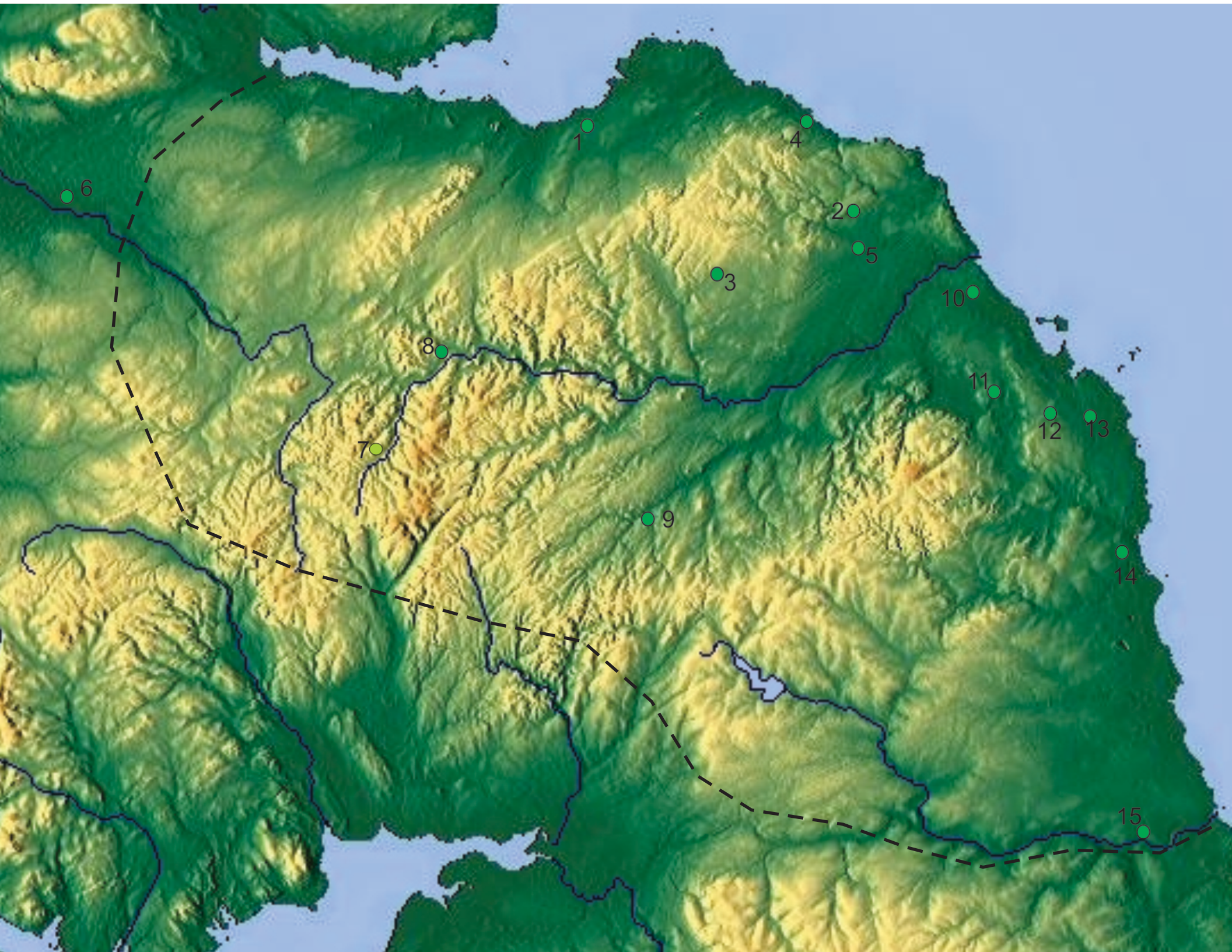
Vase Urns

Vase Urns (traditionally called Enlarged Food Vessels or Encrusted Urns) were found on 18 sites in the study area and a total of 26 of them were examined for this research (Map 6.5). All of the vessels in this category are Bipartite or Tripartite Vase Urns and several of them also have applied cordons and pellets that place them into the former category of Encrusted Urns, although there is no reason to believe that this should separate the 26 vessels into two

Map 6.5: Vase Urns

1. Birsley, Tranent, East Lothian
2. Lintlaw, Bunkle & Preston, Berwickshire
3. Howlet's Ha', Westruther, Berwickshire
4. Hoprig, Cockburnspath, Berwickshire
5. Berwickshire?
6. Kylepark, Uddingston, Lanarkshire
7. Cloburn Quarry, (Hamildean Farm), Peeblesshire
8. Tappitknowe, Hamildean Farm, Peeblesshire
9. Lilliesleaf, Roxburghshire
10. Scremerston Hill, Northumberland
11. Goatscrag, Northumberland
12. Rosebrough, Bamburgh, Northumberland
13. Chatton Sandyford, Northumberland
14. High Buston, Northumberland
15. Ryton-on-Tyne, Tyne & Wear

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD.



rim edge on the outside is flat. Below this on the neck of the vessel, there are one or more bevelled areas above the shoulder carination. On tripartite vessels, it is common that the bevels are divided by 4-5 ridge-stops, which are placed, off-set, between bevels and are always unperforated. The upper portion of Vase Urns tend to have straight walls, similar to the collars of Collared Urns, and under the shoulder carination, the walls then bend inward, creating a vase shape that extends to a flat base that is marked by a pedestal. Inside, the transition from wall to base is typically gradual/abrupt with a defined, flat base. The walls of these vessels range from 7 mm-25 mm in thickness, but most of the pots examined have walls that are about 16 mm thick. The smallest vessel is 250 mm tall, whilst the largest is 430 mm and most fall in the larger range, about 380 mm high. The rim diameters tend to be wide (280-330 mm) to suit the size of the vessels, but the bases are narrow (100 mm) and in many cases they are top-heavy, which suggests that they were made to be inverted. Most of the vessels have survived entirely, but for those that have not, it is more common to find their rims, as the bases often get knocked off by the plough.

The fabric of the Vase Urns is similar in texture to Collared Urns (possibly because of their similar size), but it bears similarities to Food Vessels as well. Most have a lithic content that makes them gritty, very gritty or extremely gritty, as would be expected with a larger vessel, but some sandy and clay-rich examples were observed. The inclusions are mostly dark grey and black lithics, such as Collared Urns, and although the inclusions are not as variable as with Food Vessel, there is a lower grog content in this tradition than with the later urns. The lithic inclusions tend to be angular, indicating that they were prepared, but there are many rounded ones too, so natural gravel was either added or gritty clay was preferred to make these pots. Unlike Beaker, Food Vessels and Collared Urns, there is little crushed lithic. All of the vessels have a very heavy slip over their gritty surfaces and many have striations on them from wiping the surface to smooth it. Some of the vessels are burnished to a dull sheen. Unlike some of the Collared Urns, all of the joins are carefully smoothed so that none are visible and the form of the pot appears almost moulded.

The decoration on the Vase Urns has great similarities with the urn traditions as well as Food Vessels. The rim top and edge are usually decorated, and the motifs used on each tends to



Figure 6.45: The scalloped collar on the Roseborough I vessel from Northumberland.

be different, although complementary. For example, horizontal lines or chevrons are usually impressed onto rim tops, whilst short diagonal lines then ornament the rim edge. On the exterior of the pots, decoration is sometimes confined to the rim and neck and around the pedestal at the base, similar to Collared urns, but on many other examples the entire vessel is decorated, which recalls Food Vessels. Impressed motifs are most-used, including: twisted cord, grooving, slashes, stab-and-drag marks, plaited cord, birdbone and stabmarks, and these tend to be placed in combinations that create zigzags, herringbone and horizontal and vertical line combinations. One vessel of interest from Rosebrough I (Northumberland) has scalloped ridges, created by gouging out sections of the ridge on the rim and shoulder (Figure 6.45). It is then fully decorated with very light incision over the entire surface that creates a brocade effect.

Applied decoration is also present on the vessels in the form of cordons in horizontal lines, zigzags (for example, at Berwickshire, NMS X.EA 185 and Ryton-on-Tyne, Tyne & Wear) (Figure 6.46) and vertical lines that act as ridge-stops in the ridges of the vessel neck (Goatscrag, Northumberland and Berwickshire, NMS X.EA 182) (Figure 6.47). Pellets are also applied to the pots, usually in rows (as at Lintlaw (Berwickshire), NMS X.EA 203) or as infill for the triangles that are created by a zigzag cordon in the pot's neck bevel (Uddingston (Lanarkshire), NMS X.EA 108). Often these applied ornaments are then emphasized by impressions that border them or



Figure 6.46: Vase Urn from Ryton-on-Tyne, Tyne & Wear.



Figure 6.47: Vase Urn with heavy ridge stops from Goatscrag, Northumberland.

that change direction from the greater pattern. For example, at Goatscrag, the ridge-stops are decorated with horizontal lines of whipped cord that contrast to the rows of vertical lines of the same whipped cord that fill the bevels as well as just below the shoulder of the vessel. At Uddingston, the cordon zigzag is bordered at top and bottom by plaited cord. There is one radiocarbon date for a Vase Urn from the study area at Dunion Hill (GrA-24006), which calibrates to 1610-1419 cal BC, but they are the poorest dated of the Bronze Age cinerary urn traditions. Only 15 radiocarbon dates have been obtained for Scotland (Sheridan 2007). This places them at the very beginning of the cinerary urn sequence, with the earliest dates ranging within Food Vessel and Beaker times at c. 2150-1950 cal BC, although many of the dates are closer to 1750-1500 cal BC. A similar range of 2050-1750 cal BC is calculated for Ireland (Sheridan 2003: 205; Lanting & Brindley 1998; see also Sheridan 2007b).

It is known that Vase Urns were made in northern Britain and Ireland at the same time that Collared Urns developed in southern England and that Collared Urns eventually spread across the islands to replace Vase Urns. The question is how and why this occurred that is in question. In 1961, Longworth wrote that he believed that Vase Urns represented the product of local people imitating the Collared Urns they saw when they came into contact with those who made the southern styles. They enlarged the Food Vessels they were already making. Indeed, the vessels found in the Tyne-Forth region demonstrate a mixing of traditions in their form and decoration; however, based on the latest radiocarbon dates, it is probable that it was the other way around and that



Figure 6.48: Applied decoration on NMS X.EA 185 from Berwickshire.

Food Vessels influenced Vase Urns, which in turn, influenced Collared Urns (Burgess 1986; Sheridan 2007). Of the 14 Vase Urns that have survived well enough to determine the pot's entire decorative style, only 3 are fully decorated as with Food Vessels. The rest have their decoration confined to the upper 2/3 of the vessel, as with Collared Urns. Much of the decoration is still similar in style to Food Vessels, such as the prominent use of herringbone on the rim top and collar, followed by slashes on the lower body, but typical themes from Collared Urns appear too. On the collars of



Figure 6.49: Twisted cord decoration of infilled triangles on the rim top from Howlet's Ha', Berwickshire.

the Vase Urns, single zigzags of cord under the rim on the outside are seen on NMS X.EA 185 from Berwickshire and at Uddingston (Lanarkshire) (Figure 6.48); infilled triangles surround the rim at Ryton-on-Tyne (Tyne & Wear) and at Howlet's Ha' (Berwickshire) (Figure 6.49); and panels of alternating sets of horizontal and vertical lines of cord are under the rim at Hoprig (Berwickshire) (Figure 6.50) and on EA 182 from Berwickshire (Figure 6.51). On all of the Vase Urns, the form of the rim follows the Food Vessels' closely, with a use of ridges and bevels above a vase-shaped body, and the ratio of rim diameter versus base diameter demonstrates a closer relationship to that of Food Vessels than to Collared Urns (that have much narrower bases) (Graph 6.1). It is clear that Vase Urns were made larger than Food Vessels and their height appears to have influenced the shape of Collared Urns. When considering the rim diameters compared to the height of the vessels of the Tyne-Forth region, there seems to have been an attempt to make Vase Urns more uniform in size. The Vase Urns cluster in an area of the graph away from Food Vessels, whilst Collared Urns have a greater range that



Figure 6.50: Illustration of the vessel from Hoprig, Cocksburnpath, Berwickshire (from Hardy 1887, 132).

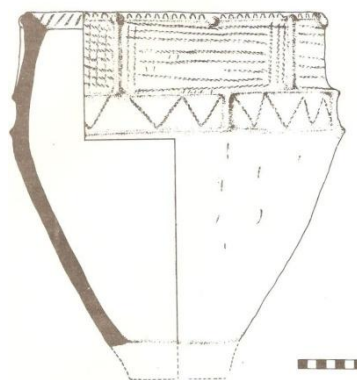


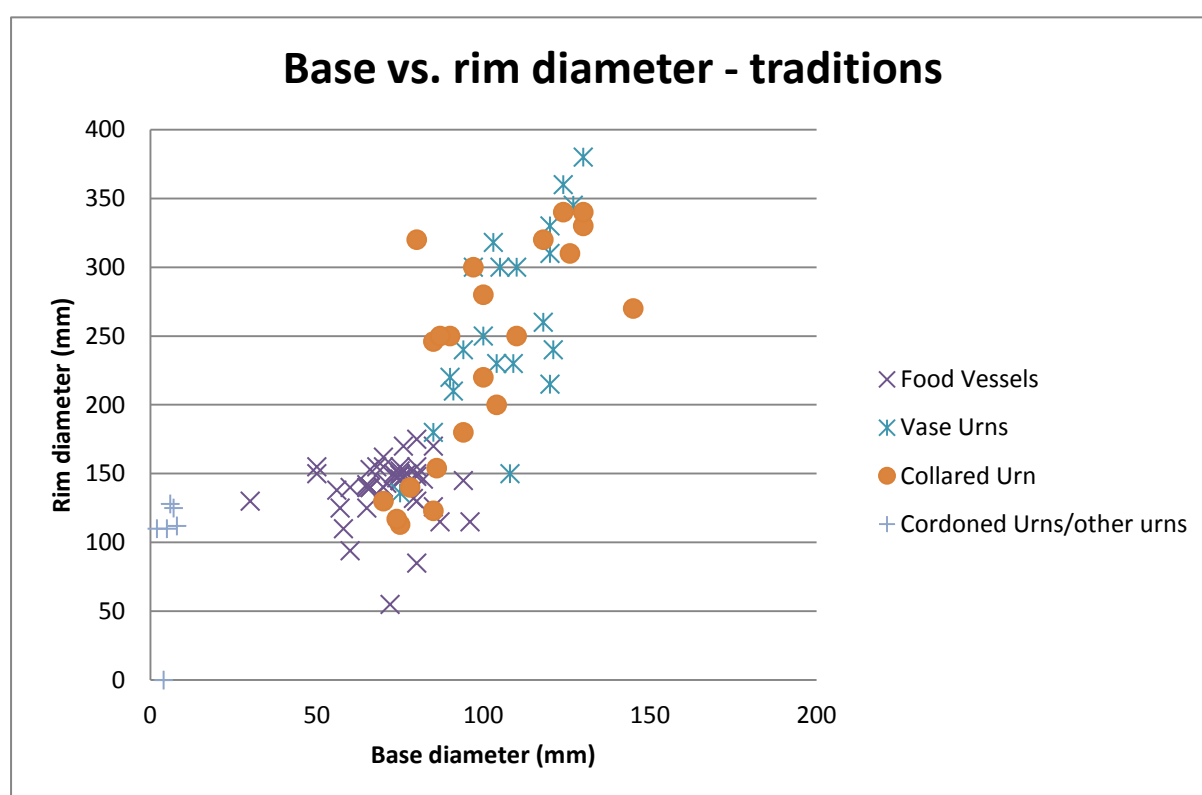
Figure 6.51: Illustration of NMS X.EA 182 from Berwickshire (from Longworth 1984).

include pots closer in size to Food Vessels (Graph 6.2). So, it would appear that the people making Vase Urns were attempting to create a pot that was specifically different than the Food Vessels they had been making before. Once Collared Urns were made, this distinction seems to have been less important.

What appears to be more important is the change in activity that is expressed in the ceramic style rather than the vessels themselves. The similarities that connect Vase Urns to Collared

Urns only serve as details that highlight a greater picture, whereby things were changing on a broad geographical scale. What is important is that at some point the tradition of burying a person's cremated remains with a Food Vessel and associated artefacts (jet beads, flint knives, etc) changed to one that involved placing the cremated remains of the person into the Vase Urn, covering it with a perishable material (such as a leather or cloth tied over the opening) and inverting it into a pit where it was covered with soil, and perhaps, a slab or two of stone.

Graph 6.1: Vessel Proportions of Bronze Age Ceramics

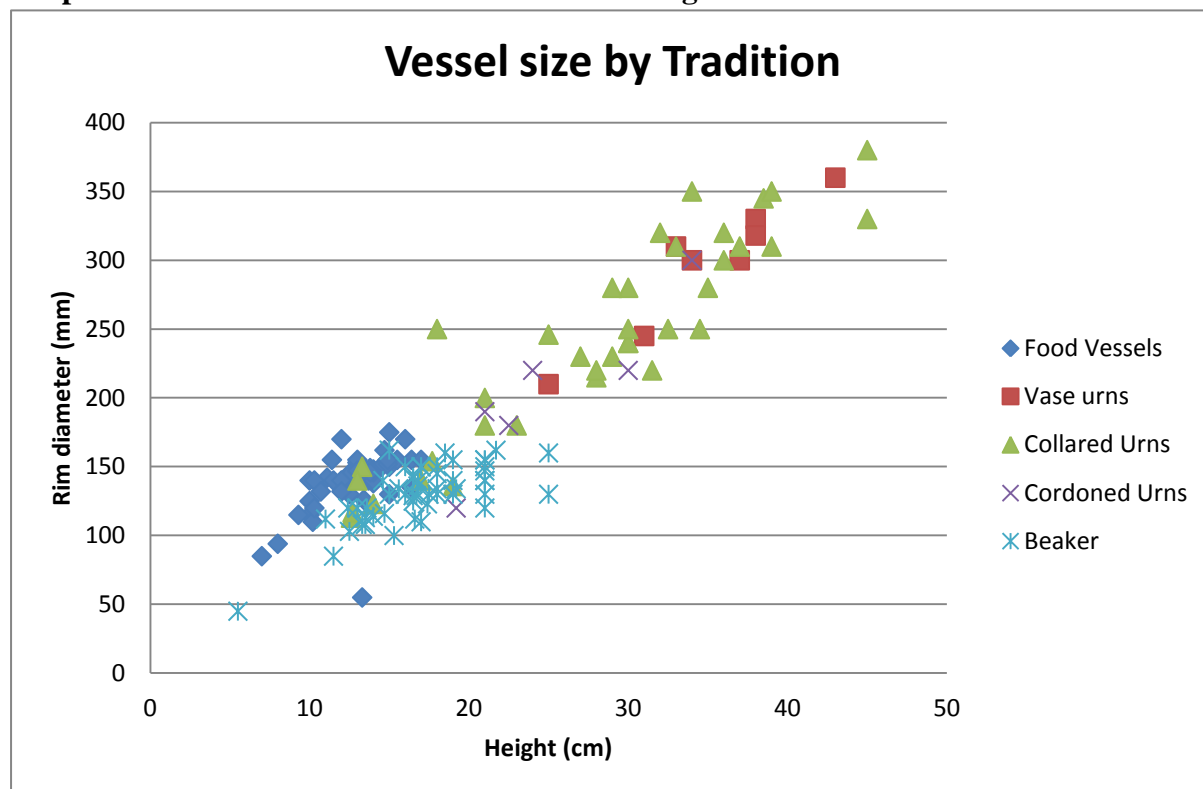


Of the 26 vessels that were examined, only two were found standing upright containing the cremated remains (at Rosebrough I (Northumberland) and Birsley (East Lothian)) and just three others were found in cists (High Buston (Northumberland), Hoprig (Cockburnspath, Berwickshire) and Luffness (East Lothian)). The rest of the evidence was overwhelmingly consistent. Although these changes are striking, it must be recalled that they begin with vessels that bear strong characteristics to the earlier Food Vessels and many are in the same

burial places. The Collared Urns appear only slightly later (about a generation or two), but also are placed in the same mounds and the domestic sites continue for habitation where the pottery found there does not really change. So it would suggest that this was a shift in ideology and practice, but does not necessarily represent a break in ties to the past.

Collared Urns

There are more radiocarbon dates from the study area for Collared Urns and these demonstrate that the spread of this southern tradition occurred at a quick pace immediately following the first use of Vase Urns. The earliest date in direct association with a Collared Urn comes from Birkside Fell (Northumberland), which calibrates to 2126-1746 BC (Tolan-Smith 2005, re-calibration done for this research with OxCal 4.1); however, the range seems to be c. 2050/2000 – 1500/1400 cal BC with most in the later part of this timeframe. Of the 68 sites found recorded in the literature, 57 Collared Urns and 7 Cordoned Urns from 39 sites were examined. These were located in both lowland and upland areas and appear to be evenly spread across the region (Map 6.6 and 6.7). Most were found in a pit or cist, inverted over the cremation of one or two individuals, and in 10 cases an accessory vessel was also placed in the urn. A mound sometimes covered these burials and in some cases the burials were dug into earlier mounds that had been used since Beaker or Food Vessel times. The only concentration is in Edinburgh, but this may be due to the modern development of the area revealing more findspots than in less-studied parts of the country. Although later Cordoned Urns and Bucket Urns were also found throughout the region and will be discussed

Graph 6.2 :The size of the vessels in the Bronze Age

in turn, it is important to mention that the Collared Urn tradition seems to have been the most intense and enduring as more examples of these vessels are present more often than all the others combined.

The Collared Urns that were examined fit Longworth's (1961; 1970; 1984) classification system. The rim top is usually insloping and bevelled, but flatter, simple rims were observed as well. All of Longworth's (1984, 6) collar forms are present, although most common are those that flare out slightly at the bottom (forms b and c). The collar itself can be subtle, bending in near the rim and only really defined by the narrower neck below (not unlike the bevels of a Vase Urn), or it can be a more dramatic, moulded portion of the vessel with clear joins where it was fitted as a separate piece to the deep neck cavetto. The cavetto can be deeply concave or straight, but both types end with a carination at the shoulder. Some vessels do not have a cavetto and simply consist of an overhanging collar set on top of the body (as per Longworth's Primary Series, B range; Figure 6.52).



Figure 6.52: An example of a vessel in Longworth's Primary Series, B range.

The walls of the Collared Urns range from 8 mm – 20 mm, although most are about 15 mm thick. They bend in under the collar to form a vase-shape to the body, but this is usually gentle, creating a rounded belly before narrowing quickly to the base. The bases are flat and many have a pedestal, particularly if they have a *very* narrow base, and the transition inside is typically gradual, although more abrupt transitions were seen in some cases. The average vessel is 300 mm tall, but smaller ones (as short as 140 mm) and taller ones (450 mm) were noted as well. The rim diameters range from 113 mm – 350 mm, with the usual width about 240 mm and the base diameters, which were 74 mm – 145 mm (averaged to 100 mm wide). Perhaps, because of their greater size and weight, there were more Collared Urns found with oval rims than any of the other types of pottery.

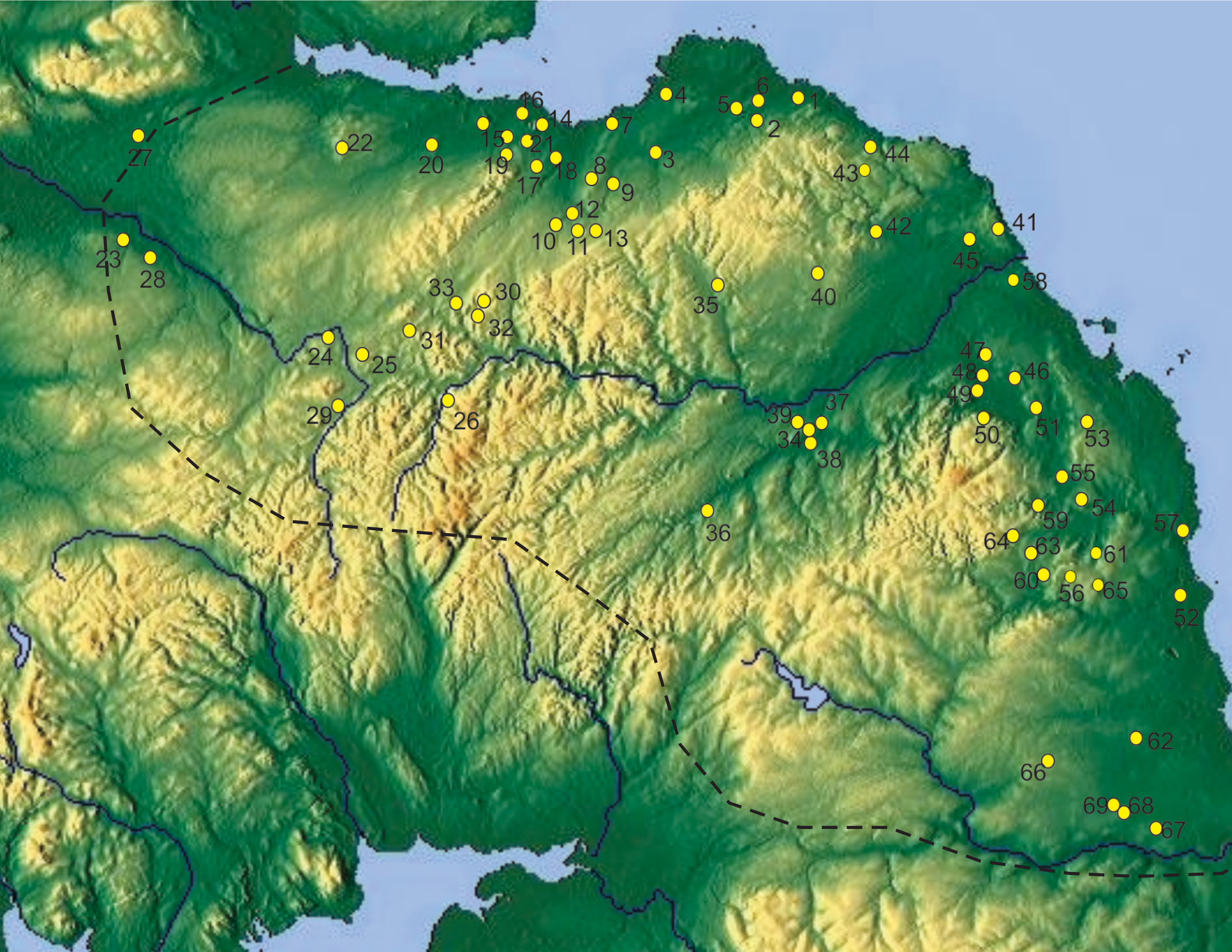
For the most part, the fabric is gritty, very gritty and extremely gritty in texture, although a few clay-rich and sandy examples are present. The inclusions are mostly medium (3-5 mm) to extremely large (9 mm+) and consist of natural and angular, prepared lithics. A high content of grog and burnt-out organics were noted. It is probable that this composition is due to the size of the vessels and the mechanical stresses placed on them during firing.

The decoration on the Collared Urns is confined to the upper 1/3 of the vessel and follows the norm for the tradition in Britain generally. The rim top, collar, cavetto and sometimes just below the shoulder are impressed with motifs of twisted and whipped cord, particularly in converging diagonal lines that form infilled triangles on the collar (Figure 6.53); horizontal lines on the rim top and borders on the collar; and panels of opposing horizontal and vertical lines of cord on the collar (Figure 6.54). Cross-hatching and diamond lattice are often found in the cavetto and rows of stabmarks on the rim top and on the shoulder are common. Less common are the motifs on the vessels at: East Links (Dunbar, East Lothian), where the cavetto and collar is decorated with rows of horse-shoe-shaped impressions of twisted cord in rows (Figure 6.55), and in Berwickshire on NMS X.EA 186, which has rows of circular impressions made by a hollow stick or reed (Figure 6.56). Four undecorated pots were found at: Hoprig (Berwickshire); Toxside Sandpit, Dalkeith, and Torcraik (all Midlothian); and Cambuslang (Lanarkshire). Although this is less common, it is not unusual. There is only one example of a Collared Urn that is entirely decorated at Lintlaw (Berwickshire). Deviations in style are not uncommon within the Collared Urn tradition, and so it should not be surprising to see this in the Tyne-Forth region compared to other parts of Britain.

Map 6.6: Collared Urns

1. East Links, Dunbar, East Lothian
2. Meiklerigg, Stenton, East Lothian
3. Longniddry, Boglehill Wood, Gladsmuir, East Lothian
4. Quarryford, Haddington, East Lothian
5. Traprain Law, Prestonkirk, East Lothian
6. Eweford, East Lothian
7. Kirkpark, Musselburgh, Midlothian
8. Dalkeith, Midlothian
9. Cranston, Blacklaw Knoll, Slaughland Farm, Ford, Midlothian
10. Toxside sandpit, Gladhouse Reservoir, Temple, Midlothian
11. Outerston Hill, Temple, Midlothian
12. Arniston, Temple, Midlothian
13. Torcraik, Borthwick, Midlothian
14. Magdalen Bridge, Joppa, Portobello, Edinburgh, Midlothian
15. Shandon cres., Edinburgh, Midlothian
16. Craigentenny, Edinburgh, Midlothian
17. Braid Hills, Edinburgh, Midlothian
18. Windy Goul, Arthur's Seat, Edinburgh, Midlothian
19. Juniper Green, Edinburgh, Midlothian
20. Ratho, Edinburgh, Midlothian
21. (Stackyardfield), Gourlaw, Midlothian
22. Cairnpapple, Torphichen, West Lothian
23. Dremshargard, Cambuslang, Lanarkshire
24. Sheriffflats, Thankerton, Lanarkshire
25. Hangingshaw Plantation, Lamington, Lanarkshire
26. Cairngryffe, Pettinain, Lanarkshire
27. Cadder, Bishopriggs, Lanarkshire
28. Kylepark, Uddingston, Lanarkshire
29. Lintshie Gutter, Lanarkshire.
30. Green Knowe, Peeblesshire.
31. Broughton Knowe, Peeblesshire
32. Meldon Bridge, Peeblesshire
33. Harehope Cairn, Peeblesshire
34. Monklaw, Jedburgh, Roxburghshire
35. The Kip, Falla, Oxnam, Roxburghshire
36. Teinside, Teviotdale, Roxburghshire
37. Monteviot, Jedburgh, Roxburghshire
38. Dunion Hill, Jedburgh, Roxburghshire
39. Chesters, Ancrum Moor, Roxburghshire
40. Longcroft, Lauderdale, Berwickshire
41. Lintlaw, Bunkle & Preston, Berwickshire
42. Spottiswood, Berwickshire
43. Oldcambus Townhead, Cockburnspath, Berwickshire.
44. Hoprig, Cockburnspath, Berwickshire
45. Berwickshire?
46. Ford, Northumberland
47. Etal Moor, Northumberland
48. Whitton Hill, Northumberland
49. Milfield, Northumberland
50. Tom Tantallon's Grave, Kirknewton, Wooler, Northumberland
51. Doddington Moor, Northumberland
52. Broomhill, Northumberland
53. Rosebrough, Northumberland
54. West Lilburn, Northumberland
55. Kirkhill, West Hepple, Northumberland
56. Howick Heugh, Northumberland
57. Standrop Rigg, Northumberland
58. Broomridge, Northumberland
59. Ingram Hill, Northumberland
60. Harehope Hill, Eglington, Northumberland
61. Green Leighton, Hartburn, Northumberland
62. Scrainwood, Alnwick, Northumberland
63. High Knowes, Alnham, Northumberland
64. Warksworth, near Wark, Northumberland
65. Catcherside, Kirkwhelpingham, Northumberland
66. Broomhouses, Ovington, Northumberland
67. Rye Hill, Hexham, Northumberland
68. Birkside Fell, Hexham, Northumberland
69. Low Moralee Farm, Haydon Bridge, Northumberland

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD.



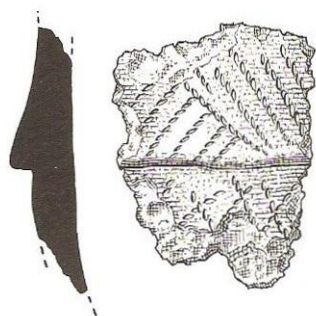


Figure 6.53: Infilled triangles on the collar of an urn (from Longworth 1984).

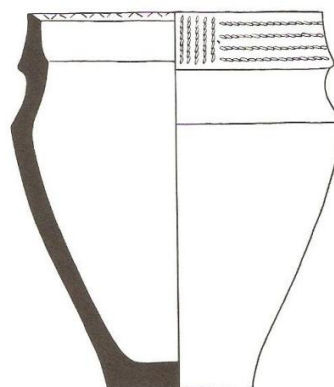


Figure 6.54: Panels of horizontal and vertical rows of cord on the collar of an urn (from Longworth 1984).

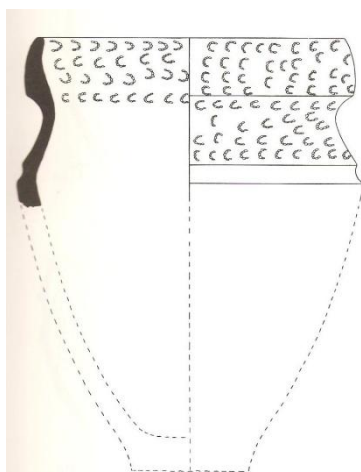


Figure 6.55: Urn from East Links, East Lothian with horse-shoe-shaped impressions on collar (from Longworth 1984).



Figure 6.56: NMS X.EA 186, from Berwickshire, is decorated with a reed or bone on the collar.

Cordoned Urns

Thirteen Cordoned Urns were examined from eight sites in Scotland: Pinkie Mains (Musselburgh); Kirkpark (Musselburgh); Outerston Mains, Temple, Magdalen Bridge, Edinburgh and Ford (all Midlothian); Kipps (Torphinchin, West Lothian); Sheriff-flats (Lanarkshire); and Drumelzier (Peeblesshire). Cordoned Urns were also found at Meldon Bridge (Speak & Burgess 1999) (Map 6.7). In Scotland, generally, Sheridan (2003, 209) sets the temporal range for Cordoned Urns from 1880-1500 cal BC, which places them in use slightly later than Collared Urns. It is for this reason that she suggests that they may represent a localised response to the wider Collared Urn tradition. Indeed, Burgess (1984) noted that the earliest Cordoned Urns appear very similar in form to Collared Urns – an observation that is echoed in by Brindley (2001, in Sheridan 2003) regarding those found in Ireland. The range for Cordoned Urns appears to spread diagonally across Ireland to the Isle of Man and through the southwest to the mid-east of Scotland (Sheridan 2003, 204). This places those pots found in the study area on the southeast border.

The Cordoned Urns have simple or stepped rims and have an overall bucket-shape with splayed walls and a flat base. The walls are of similar thickness to the Collared Urns: 10 mm-15 mm, with most about 13 mm, and they range in height from 140-340 mm, although most are 240 mm tall. The typical rim diameter is about 190 mm and the base is only slightly smaller at 110 mm. They are different from Bucket Urns because horizontal cordons are placed at intervals on the body to mark out the collar, neck and lower vessel. In many cases, this gives the pot the same form as Collared Urns, although in an un-moulded fashion.

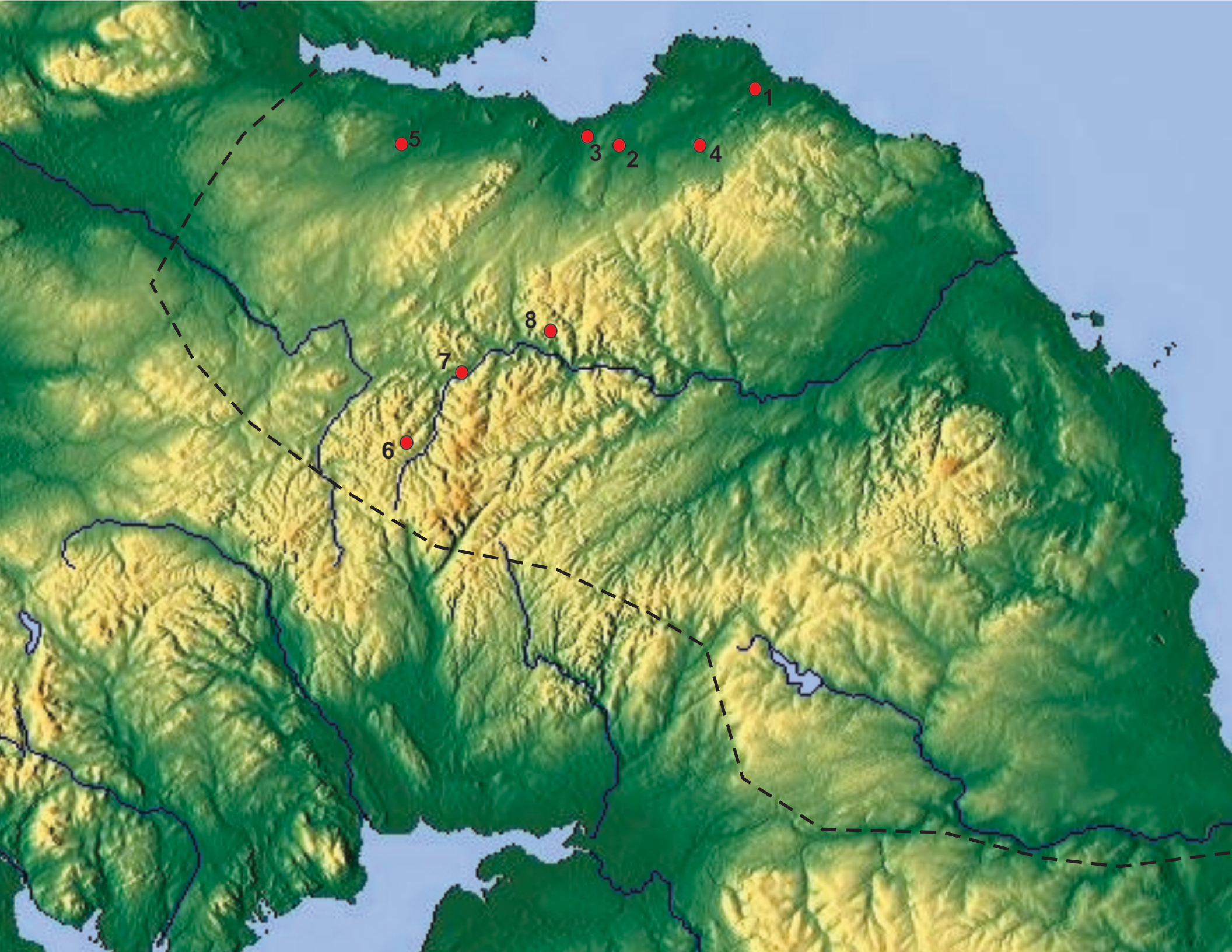
The fabric is very similar to the Collared Urns and angular lithics, grog and organics were the most common types of inclusions. These give the clay a very gritty texture, although clay-rich and sandy examples were observed. As with the other urns, they are heavily slipped to cover this and to create a smooth surface on which to impress decorative motifs.

The way in which these vessels were decorated seems to be much the same as Collared Urns. Some have no decoration at all, whilst others (such as Outerston Hill, Midlothian) are completely decorated. At Kirkpark, the decoration is confined to the collar, which is defined by a cordon, and consists of parallel diagonal cord impressions with a horizontal cord line forming a top

Map 6.7: Cordoned and Bucket Urns

1. Eweford, East Lothian
2. Pinkie Mains, Musselburgh, Midlothian
3. Kirkpark, Musselburgh, Midlothian
4. Ford, Midlothian
5. Kipps, Torphichen, West Lothian
6. Sheriff flats, Thankerton, Lanarkshire
7. Drumelzier, Peeblesshire.
8. Meldon Bridge, Peeblesshire

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD.



and bottom border (Figure 6.57). The vessels from Drumelzier also have decoration only on the top of the vessel and for the most complete pot from this site, the motifs consist of twisted cord diamond lattice and infilled triangles (Figure 6.58). Vessel 66 at Meldon Bridge bears striking similarity to both these examples in overall form and decoration (Speak & Burgess 1999, 74; Figure 6.59). It has smoothed cordons that create the tripartite form and rows of cord as ornament on the rim top. The collar is then decorated with an infilled diamond pattern with horizontal lines above and below as borders.



Figure 6.57: Cordonned Urn from Kirkpark, Musselburgh, Midlothian.

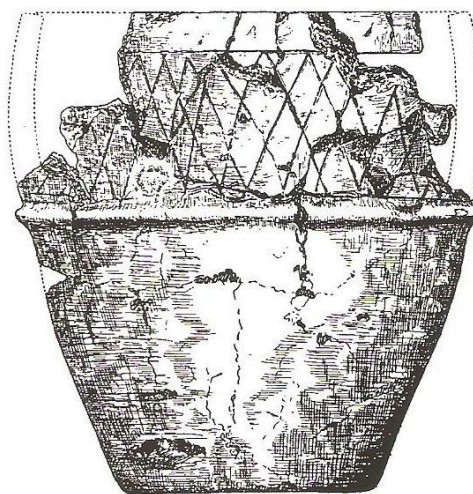


Figure 6.58: Cordonned Urn from Drumelzier, Peeblesshire (from Craw 1930-1, 368).

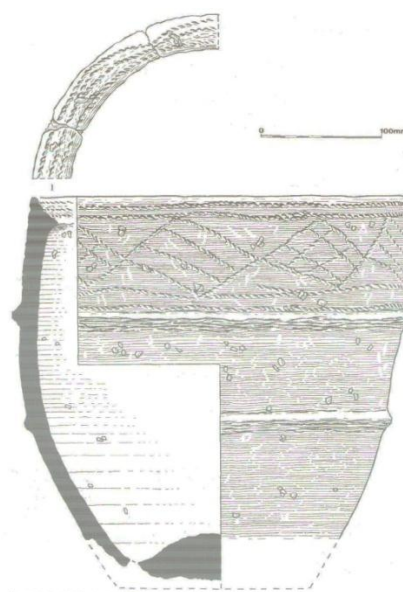


Figure 6.59: Cordonned Urn found at Meldon Bridge, Peeblesshire (from Speak & Burgess 1999: 74)

Although the evidence for this research includes only a few of the Cordoned Urns because the study area just grazes the southern border of this tradition, what is evident about the vessels is that they are similar to Collared Urns in fabric and decoration. It is only the form in which they differ, and even in this, the ideal tripartite vessel is still created, but only in a different way, using cordons instead of curves. In the cases of a few of the vessels, it is almost as if the applied cordons were used by potters in an attempt to make those curves in a subtler way. For NMS X.EA 149 from Kirkpark the similarity to a Collared Urn is so successful that this vessel was originally defined as one by Longworth (1984, 307; Burgess 1984) and EA 38 from Magdalen

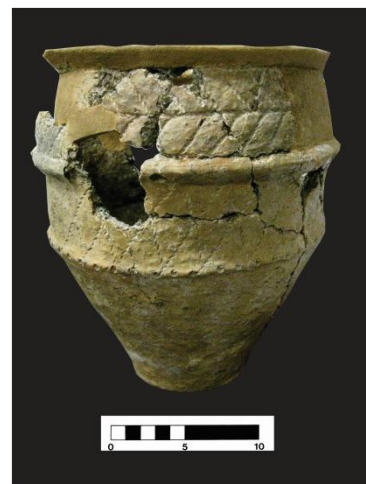


Figure 6.60: NMS X.EA 38 from Magdalen Bridge, Edinburgh, Midlothian.

Bridge certainly could be mistaken as well and this is something that recurs through the Cordoned Urn tradition elsewhere (Sheridan 2003, 209-210; Figure 6.60). Sheridan (2003, 210) argues that the distinction between the Collared Urns and Cordoned Urns may be more arbitrary than has been stressed in the literature. It is possible that Cordoned Urns were not seen as different by local people and that it is we who have created the difference, based on ceramic style, where a difference did not exist.

Bucket Urns

In addition to the Collared and Cordoned Urns, Bucket Urns were also found at Whitton Hill II (Northumberland) and at Meldon Bridge (Peeblesshire) (Speak & Burgess 1999). Sheridan (2003, 210-212) describes Bucket Urns as a 'blanket term' for the rest of the cinerary urns

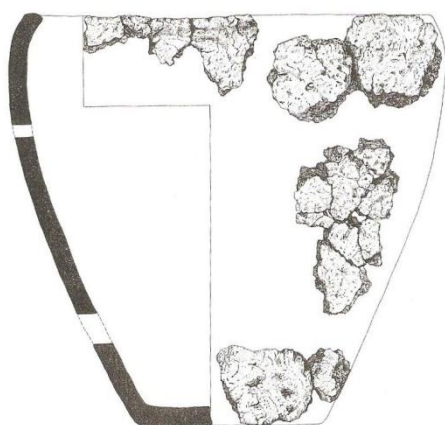


Figure 6.61: Vessel from Whitton Hill, Northumberland (from Miket 1985: 142).

that were used at the end of the urn sequence. They vary in their characteristics and probably represent a variety of urn traditions that co-existed from the end of Collared Urns to the end of the Bronze Age. The vessel from Whitton Hill has a simple, inturned rim, splayed walls and a flat base (Figure 6.61). It is made from coarse, gritty clay with added, angular lithic inclusions and has no decoration impressed or applied. At Meldon Bridge, vessels 67 and 68 have slightly

bevelled rims that bend inwards over straight/slightly splayed walls and flat bases. They also have coarse, crumbly fabrics with lithic inclusions and are undecorated. It is important that MacSween (1999, 78) draws attention to the similarities between these vessels and the domestic pottery found at Green Knowe nearby that Jobey observed in the late 1970s (Jobey 1978a, 87). At both sites, these vessels were found broken in pits with cremated remains, but it is probable they broke after deposition.

Accessory Vessels

From contexts with Collared and Cordoned Urns, 11 accessory vessels from 7 of the 10 recorded sites were also examined (Map 6.8). All were found either under inverted urns or buried near them in the same pit and were from sites that were used more than once for several burials.

Vessels that resemble tiny Collared Urns (Gibson's (2004: 272) type 7) were found at Low Moralee Farm (Haydon Bridge, Northumberland) and Kirkpark (Midlothian). They have inturning collars, flattened rims and bodies with splayed walls and a flat base.

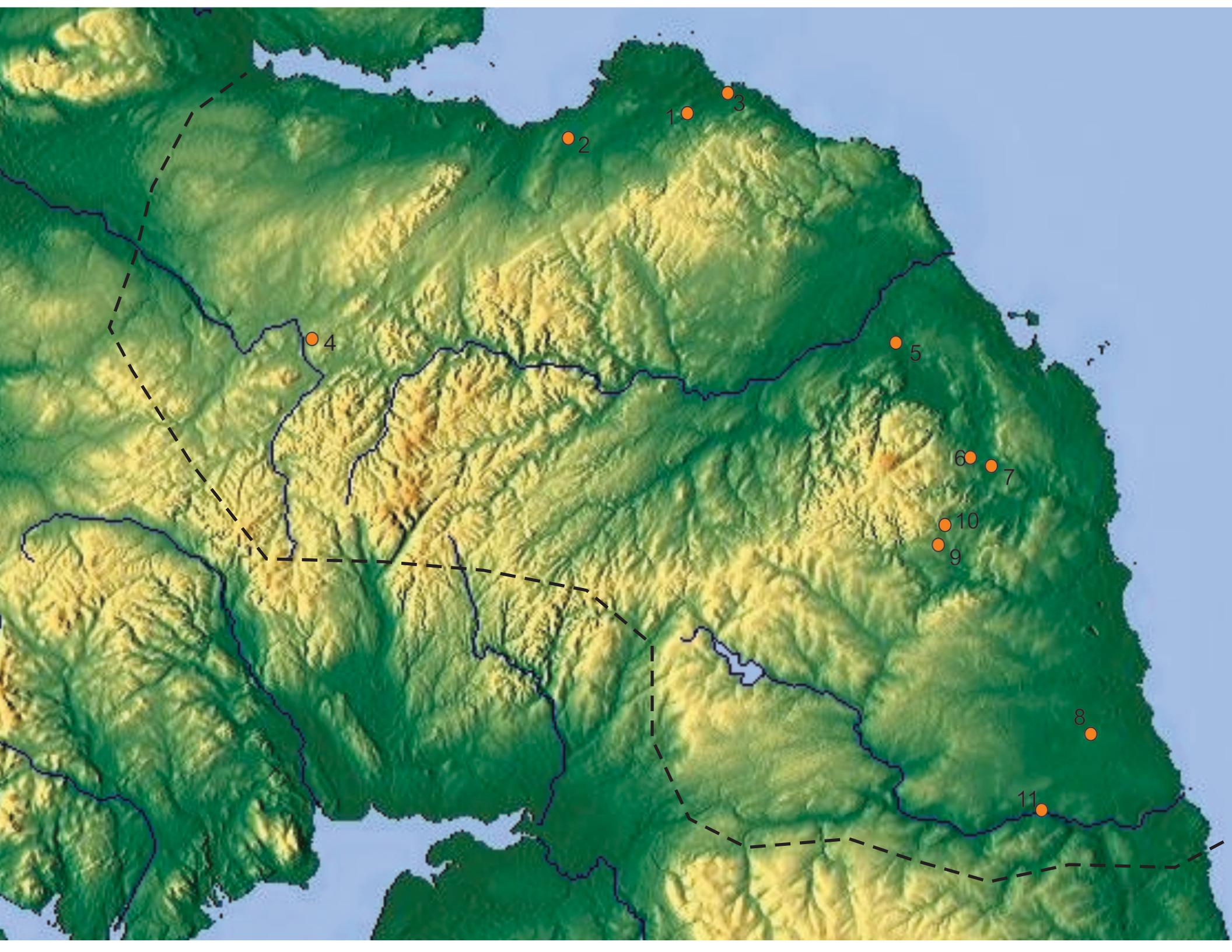
At Dunbar (East Lothian); Rothbury (Northumberland) and Belsay (Northumberland), accessory vessels that have 'flying saucer' shapes, fitting Gibson's type 5, appear to be collars on very tiny bases. They have flat rim tops and very short walls under the collar that meet at a very small, shallow base that is flat and concave.

At Lilburn Hill (Northumberland) and Low Moralee Farm (Northumberland), the accessory vessels were small, squat pots with simple rims and flat bases, Gibson's type 2. Internal moulding on the rim was observed on the Low Moralee Farm vessel, but for the most part, their form is not overly complex. At Kirkpark (Musselburgh) and Sheriff-flats (Thankerton), accessory vessels such as these have more globular bodies, but also have simple, rounded rims and flat or concave bases (Gibson's type 4).

Map 6.8: Accessory Vessels

1. Traprain Law, East Lothian
2. Kirkpark, Musselburgh, Midlothian
3. Dunbar, East Lothian
4. Sheriff flats, Thankerton, Lanarkshire
5. Etal Moor, Northumberland
6. Lilburn Hill, Northumberland
7. West Lilburn, Northumberland
8. Belsay, Northumberland
9. Rothbury, Northumberland
10. Murton High Crag, Northumberland
11. Low Moralee Farm, Haydon Bridge, Northumberland

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD.



All of these vessels are well-formed and slipped and they tend to be made of clay with few added inclusions, even though the walls are thicker than would be expected with such small pots (about 7 mm, as with Beakers). A high sand content was noted, though, which may be why the pots were able to hold their form and withstand the fire. A recurring characteristic with the Accessory Vessels that is observed well back to Antiquarian times, is a set of two perforations on the side of the pot,



Figure 6.62: An example of an incense cup from Kirkpark, Midlothian, with perforations in the vessel wall.

placed horizontally on the mid-section (Figure 6.62). It is for this reason that the antiquarians called these pots incense cups; however, it could be argued that they may have been used to inset handles or string rope to be hung or carried (see Chapter 4).



Figure 6.63: The base of the accessory vessel from Low Moralee Farm, Northumberland.



Figure 6.64: Faint incision decoration on the vessel wall of NMS X.EC 30 from Kirkpark, Midlothian.

Different to Collared and Cordoned Urns, the decoration on these vessels is not restricted and they tend to be entirely decorated with motifs of grooving, incision, stabmarks, fingernail impressions, twisted cord and reed impressions. Similar designs known from the urn tradition are present: infilled triangles, diamonds, herringbone and horizontal lines. Of particular interest is the vessel from Low Moralee Farm that has decoration inside the rim and a grooved cross with stabmarks on the base: a design typical of Food Vessels (Figure 6.67). Also, at Kirkpark (Musselburgh), NMS X.EC 30 was decorated with very fine incisions in opposing diagonal lines that has an almost brocade effect (Figure 6.68).

Within each tradition of pottery found in the Tyne-Forth region, a local interpretation can be seen to personalise the vessels and to fit them within the cultures living in this area. The character of the region was clearly different from other parts of Britain and so people living in this area interpreted new incoming styles according to their own perspectives. It is because the archaeological remains in this part of Britain have suffered poor preservation that a broad temporal and spatial range was used to study the ceramics, and it is obvious that the arbitrary boundaries that were chosen will have not marked out one specific group. What has been exciting is that it is these very parameters that have allowed for cultural variability and interaction to be seen within the set boundaries. This is considered separately, and in greater depth, in the following chapter and a narrative for the Neolithic – Bronze Age is proposed.

CHAPTER 7: PUTTING THE DATA INTO PERSPECTIVE

Finding local *vernacular* tradition

The purpose of this research has been to better understand the third and second millennia BC in the Tyne-Forth region and to attempt to discern any local cultural areas within the study area. This has proven difficult with the Neolithic material as there are very few sites and fewer that yield pottery. This lack of material may be due to its burial context in pits that did not lend itself well to preservation, or it could be that fewer pots were made because identity was not as wrapped up in ceramic style as we have assumed: other (even perishable) artefacts may have been more important. With the later part of the Early Bronze Age, there are many vessels for study since they were preserved in cists, but the sites are nearly all funerary and so an analysis of these burials only considers how people handled death and not necessarily how they lived. In either the Neolithic or Bronze Age cases, there really is not enough information to look at the region closely to determine territorial groups; however, this research, which has considered the ceramics over a long period of time and has used a balanced approach addressing funerary and ritual sites in the Neolithic and domestic sites in the Bronze Age, has enabled some understanding of this period we call a ‘transition’.

It is with the arrival of Beakers and Food Vessels into the region (which already made pottery derived of the Neolithic styles) that pottery began to be preserved in cists *en masse*. As a result, much more material survived and so today we have three types of contemporary pottery that can be compared for this period: Food Vessels and Beakers for funerary places and locally-inspired pots made for domestic and ritual sites. It is with this period that cultural variability is more evident, which has led some to believe that this represents the colonization of the Tyne-Forth region; however, by considering this phenomenon set in the long-term trends, it is clear that this cultural variability probably predates the arrival of Beakers and it is only with a greater amount of pottery that they become visible.

Local Interpretations of Ceramic Style

In the Master’s research of Grooved Ware in the Milfield Basin, the fabrics of the vessels demonstrate two groups of pottery, both of which could be considered to be a part of the

Grooved Ware tradition. The first is classic Grooved Ware, as known across Britain, whilst the second group was coarser and formed a more local coarseware component to the Grooved Ware tradition. It would seem that this phenomenon was much more widespread in the 3rd millennium BC and corresponds to the coarseware component of Grooved Ware that was identified in Fife by MacSween (1999) and by Manby in Yorkshire (1999). The study also yielded coarseware pottery that was radiocarbon dated to the later half of the 3rd millennium BC, during the time of Beakers, but since the pottery was clearly not Beaker and it was found on domestic and ritual sites and bore mixed characteristics from both the Neolithic and Chalcolithic traditions, it was called ‘Neolithic-derived’ pottery by Millson et al. (2012). In this thesis, it is meant to describe all locally-influenced pottery that is contemporary to Beakers, Food Vessels and urns as a *vernacular* component of the national tradition.

It is essential to stress here that what is being proposed is not a separate ceramic tradition. The vessels in question are simply those that have characteristics that are mixed or are different enough that they do not fully ‘fit’ into the national traditions. It is on these pots that creativity and invention can be seen and local interpretations of the greater national trends might be identified. It does not mean that these vessels would have been considered any less of the tradition they were being made to reproduce, but simply that an acknowledgement of them within a study such as this provides an opportunity for us to see past choices in the chaîne opératoire and cultural interaction. It is probable that these phenomena went on with those vessels that more strictly adhere to the national trends as well, but this group of pots has been singled out simply because it is easier to discern their differences from the national traditions.

Examples of this pottery within the Beaker period have been identified in the past. What was once referred to as ‘Overlap pottery’, such as the coarse sherds with a mixture of Beaker and Grooved Ware decoration from Archerfield and Hedderwick (both East Lothian); and those sherds found alongside AOC Beaker ware at Drumelzier (Peeblesshire) and Knock Hills (Roxburghshire) fall into this category.

Of Needham’s Beaker classifications, there are two categories that seem too heterogeneous to be their own independent groups: the *weak-carinated* and the *‘s’ profile beakers*. It is the former that is thought could correlate with this vernacular component within the funerary context. Whilst his *low-carinated*, *tall mid-carinated*, *short-necked* and *long-necked* Beaker categories are groups with specific trends that hold up in a period when many types of

Beakers were made (Needham's phase 2, after the Fission Horizon), Needham's (2005, 188-9) *weak-carinated* group is much more varied. Needham characterises the *weak-carinated* Beakers as a variable group that ranges from tub-shaped pots to asymmetrical sinuous shapes and indicates that the linking characteristic is the inflection in the way the wall bends above the carination. These are the Beakers that were called 'degenerate' by Clarke (1970) and Lanting & van der Waals (1974) and that were thought to be late in the sequence, but Needham's work demonstrates that the radiocarbon dates place them in Phase 2 just after the Fission Horizon. He, therefore, suggests that the variability may indicate that these pots may have a, "...background in everyday pottery" (Needham 2005, 189). In the Tyne-Forth region, it is Beakers of this shape that have been called Beaker/Food Vessel hybrids due to their thicker walls, coarser fabric, asymmetrical form, mixed decorative motifs and angular shoulder carination and inflection that resembles the shoulder and neck bevel of a Food Vessel. It seems that some of these were used in burial as they looked enough like Beakers, but it is possible that the heterogeneity of Needham's *weak-carinated* type lies in the variability of local interpretations of the national traditions and personal creativity within a background of popular style: what Sackett (1990) calls *vernacular style*. Needham (2005, 189) is therefore right to call for these vessels to be "radically re-appraised"; however, if this is done, it is clear that this must be within a study that is broad enough, both temporally and spatially, to include more than just Beaker pottery. In this research, Needham's *weak-carinated* and 's' *profiled* Beakers have been included because of their mixed characteristics that set them apart from other Beakers and link them to the Neolithic traditions.

During the latter half of the 3rd millennium BC, the key characteristic that appears to separate this pottery from the other traditions is its coarse fabric. The texture is usually very gritty with angular, dark grey and white lithic inclusions and a very high content of natural gravel is present as well. The inclusions are mostly medium (3-5 mm) and large (5-7 mm), which sets them apart from Grooved Ware and it would appear that this is more in keeping with Bronze Age material, particularly Food Vessels, but they tend to have a greater range of inclusions used, which is more similar to Beakers and, to some extent, Grooved Ware. The walls tend to be thicker than both of these, but have a greater range from 7-15 mm, which might suggest that the assemblages (which are mostly composed of sherds) may have been from a variety of sized pots. If this pottery is linked to Burgess' domestic wares, then it appears that this would be the case.

Motifs include grooving, cordons, lugs, fingernail impressions, twisted and whipped cord and incision, and often, decoration is focused on the rim, leaving the body plain; however, with the Beaker/Food Vessel hybrids that were used in burial, the vessel is much more ornamented. At the Milfield North Henge, P5 has a crude Beaker-like shape, but its form is much more angular with a flattened rim edge and its fabric is very coarse and gritty, which fits the Beaker/Food Vessel hybrid type (Figure 7.1). The decoration on this pot is unusual and consists of vertical rows of fingernail impressions. At Cheviot Quarry a Beaker-shaped vessel was made from coarse fabric and was left undecorated (Figure 7.2) and at the domestic site of Lookout Plantation (Northumberland), where Late Neolithic/Early Bronze Age ‘Neolithic-derived’ sherds were reported as having a Beaker slip (Monaghan 1994, 35) (see Map 7.1 for sites where vessels that demonstrate vernacular style were identified).

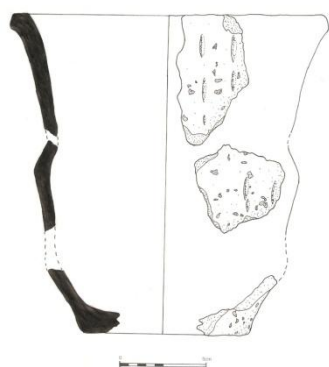


Figure 7.1: The Beaker/Food Vessel hybrid from Milfield North Henge, Northumberland (from Millson et al. 2012).



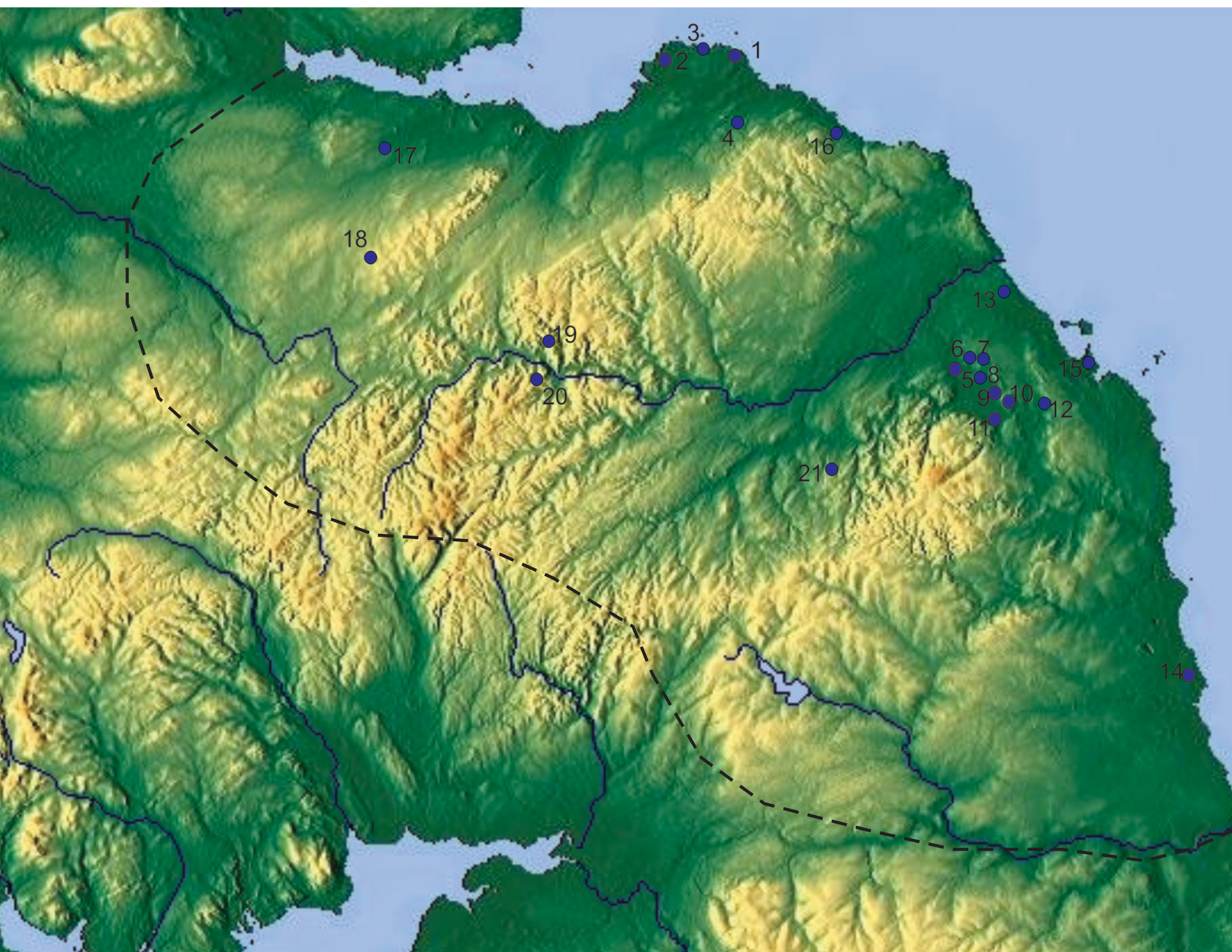
Figure 7.2: The Beaker from Cheviot Quarry, found with other coarser undiagnostic sherds.

Burgess' (1995) work picks up on this trend in the early 2nd millennium BC. His observations demonstrate that the trend for more variable and loosely decorated pots at domestic sites continues through their occupation whilst the vessels adhering strictly to convention seem to have been made specifically for burial. Burgess (1995, 150) describes the domestic pottery from the earlier contexts of the unenclosed platform settlements (contemporary to Food Vessels) as highly variable. Although some bear some associations in form and decoration to Food Vessels, for the most part the domestic pottery varies in size and shape.

Map 7.1: Contemporary Beaker-aged sites with non-Beaker pottery

1. Archerfield, Gullane, East Lothian (2 vessels)
2. Hedderwick, Dunbar, East Lothian (6 vessels)
3. North Berwick Law, (North Berwick), Berwickshire
4. Pencraig Hill, East Lothian
5. Whitton Hill, Milfield, Northumberland
6. Milfield North Henge, (Milfield), Northumberland
7. Milfield North pit alignment, (Milfield), Northumberland
8. Whitton Park, (Milfield), Northumberland
9. Cheviot Quarry, Milfield, Northumberland (2 vessels)
10. Thirlings, (Milfield), Northumberland
11. Yeavinger Henge, Northumberland
12. Chatton Sandyford, Northumberland
13. Lookout Plantation, Northumberland
14. Hirst, Ashington, Northumberland
15. Ross Links, Northumberland
16. Skateraw, (Innerwick), East Lothian
17. Cairnpapple Hill, (Torphinchin), West Lothian
18. Blackshouse Burn, Lanarkshire
19. Meldon Bridge, Peeblesshire
20. Drumelzier, Peeblesshire
21. Knock Hills, (Edgerston), Roxburghshire

*The numbers of these sites correlate to the site numbers used in the appendices and data tables found on the accompanying DVD.

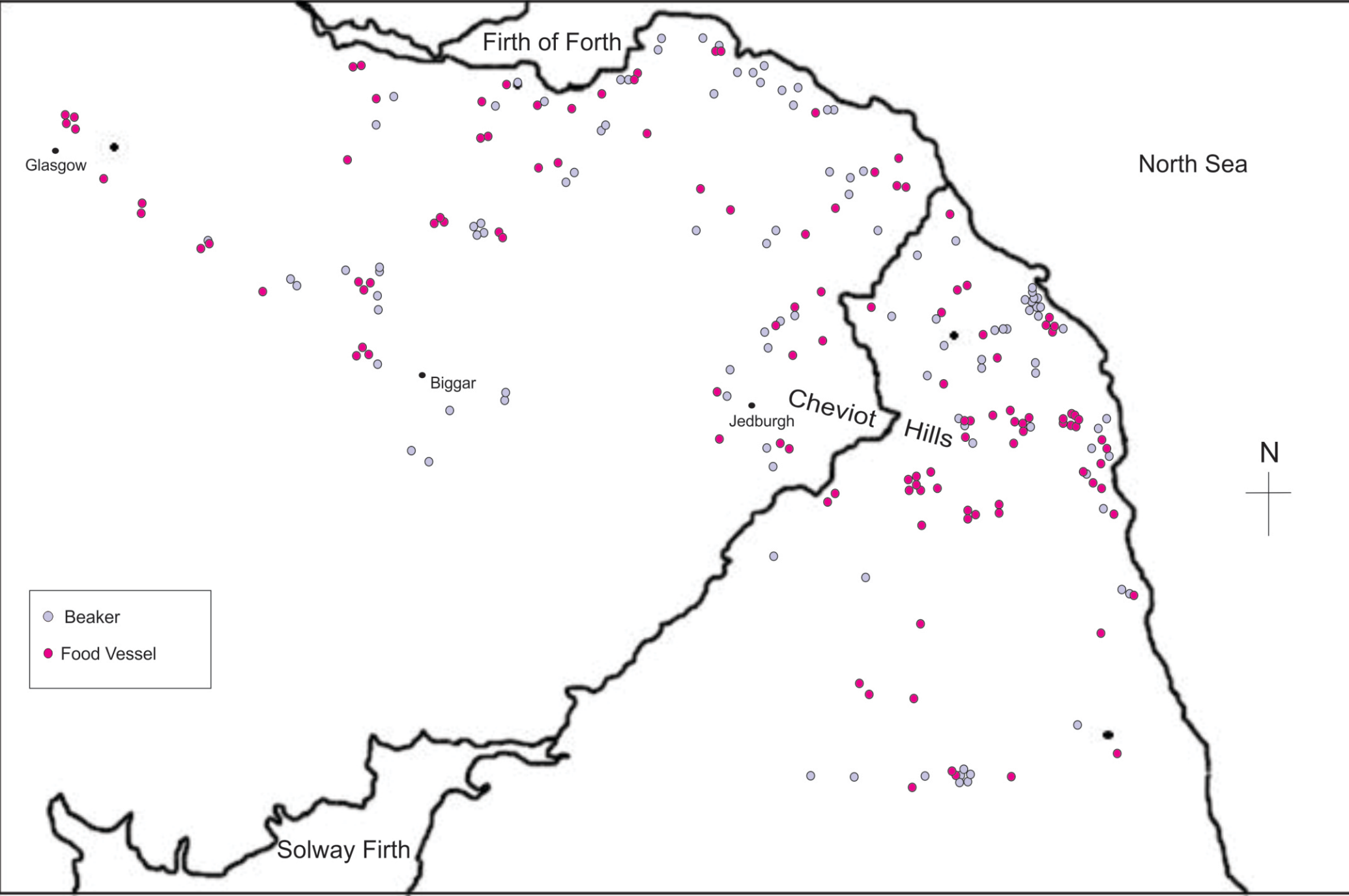


This contact and creativity in potting should not be seen as a new activity with the emergence of Beakers and Food Vessels. The Late Neolithic was not the first time that national ceramic styles came to the Tyne-Forth region: this had been happening continuously since the origins of pottery use in the area. The use and mixing of Mortlake and Fengate styles in the Middle Neolithic and the combinations of the Grooved Ware substyles in the Later Neolithic demonstrate that it was a long tradition for potters in the area to be exposed to new ideas and to make them their own. It is the identification of this that allows for the funerary wares that do adhere to national trends to be put into perspective. Local people may have adopted burial rites from elsewhere, including the paraphernalia used for grave goods, but the way a group deals with death does not necessarily define them as a living culture. Food Vessels and Beakers may have been vessels for the dead, but the archaeological evidence indicates that they were not vessels for the living. In everyday ‘living’ contexts the style of ceramics was less rigid and reflects the individuality of the region than do the standard, funerary styles. However, both must be understood, as well as the dynamic between them, to grasp what the impact of adopting these new practices had on the lifeways of people in the Tyne-Forth region.

Trends within the Funerary Evidence

The funerary sites demonstrate that the adoption of Food Vessels and Beakers were equally thorough in the region. Both have a similar distribution across the region, both in upland and lowland areas, and at many sites, both are found in the same mound. In the areas closer to the coast in East Lothian, Berwickshire and the northernmost part of Northumberland, these vessels tend to follow the pattern whereby the Beakers accompany inhumations and the Food Vessels were associated with cremations. Peripheral to this in the Cheviot Hills and Scottish Southern Uplands, the trends change. It is here where cremations can be found with Beakers and inhumations can be found with Food Vessels (Map 7.2). Although the typical Beaker forms appear in both areas, there are examples of different forms in the peripheral area as well and several vessels have mixed characteristics. Many of the Beakers have a very round, bulbous body over a very flaring neck and rim that is not seen in the coastal region. NMS X.EG 38 from Easter Wooden (Roxburghshire) is a more dramatic example of this (Figure 7.3), but NMS X.EG 25 from Mossplat (Lanarkshire) (Figure 7.4) and NMS X.EQ 138 from Crawford (Lanarkshire) demonstrate this as well (Figure 7.5). It is also common for Beakers to have a particularly

Map 7.2: Location of Food Vessels Compared to Beakers in the Tyne-Forth Region



angular shoulder carination under a flaring rim, as with EQ 858 from Newbiggingmill Quarry (Lanarkshire), NMS X.EG 92 from Drowsy Brae (Lanarkshire), NMS X.EQ 604 from Lanton Mains (Roxburghshire), and NMS X.EG 55 from Oliver (Peeblesshire) (Figure 7.6).

Although these fit Needham's (2005, 196) *long-necked* category, it is important that they are typical to this area and not the coastal region. In addition, it is in this upland area that the Beaker from Easter



Figure 7.3: NMS X.EG 28 from Easter Wooden, Roxburghshire



Figure 7.4: NMS X.EG 25 from Mossplat, Lanarkshire.

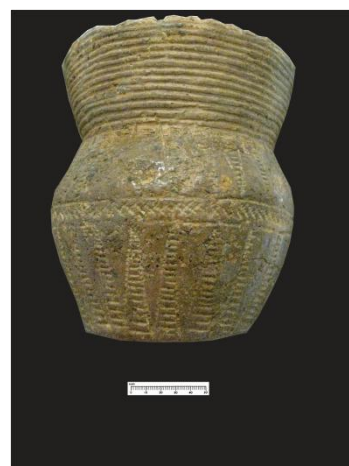


Figure 7.5: NMS X.EQ 138 from Crawford, Lanarkshire.

Wooden was found, which has grooved decoration has been used to decorate the Food Vessels. The Food Vessels from Patrickholm sand pit (Lanarkshire) and Darn Hall (Peeblesshire) are also from this region and their decoration has been done using comb, as is used on Beakers.

When considering the few domestic sites that are known for the region, a similar trend begins to appear. The only domestic sites where larger quantities of Beaker pottery are found are at the coastal sites of Hedderwick and Archerfield, both at the opening of the Firth of Forth, and at Ross Links (Northumberland) on the coast. These all have a mixture of AOC and decorated Beaker sherds mixed with domestic debris, but there does not appear to be a range of vessel forms or sizes amidst these sherds to the extent that is known for domestic Beaker sites on the



Figure 7.6: NMS X.EG 55 from Oliver, Peeblesshire.

Continent. Inland, contemporary domestic sites are found at Cheviot Quarry, Lanton Quarry, and at the unenclosed platform settlements of Lookout Plantation and Houseledge Blacklaw and in these cases, what few Beaker sherds are found are usually in association with coarser regional styles of pottery or there are simply no Beakers at all. What this implies is that the points of entry for this style of pottery are at obvious coastal sites that may have been established much earlier. In the direct surrounding region, the new ideas and artefacts were used in the way they must have been by those who brought them to the area, but once the ideas spread beyond the area of direct contact, local people interpreted them in their own ways.

The current view on contact

Needham's (2005) paper addresses the questions surrounding the nature of this contact. He sees the carriers of Beakers, what he refers to as the 'Beaker culture' as a cultural network that was distinct, or at the most, "poorly integrated within the social fabric" of the Neolithic people in Britain (Needham 2005: 207). Their focus was upon long distance trade and the acquisition of valuable resources, particularly copper, and to obtain this, they followed their *wanderlust* to distant regions where they settled and set up trading centres within the network. Once settled as a small group in a foreign land, they maintained their identity as separate from local Neolithic groups by emphasizing their culture through a set of burial practices.

Needham bases his argument on the foundation, established by Clarke (1970) and Lanting & Van der Waals (1972), that the colonization of Britain by 'Beaker folk' only occurred after the early Atlantic expansion. He cites that British early Beakers demonstrate their closest stylistic affinity with those from the Lower and Middle Rhine and very few have the low carination known from Brittany. As a consequence, Beakers must have come to Britain after they moved into the Rhine region and, "...the role of Brittany in 'colonizing' Britain with Beakers or Beaker users has always seemed minimal to judge from the non-matching of Beaker styles and burial practices in the two regions" (Needham 2005: 179).

Needham believes that the local Neolithic groups' response to the arrival of the 'Beaker people' was essentially one of jealousy and awe. Neolithic leaders were enamoured by Beaker technology, particularly metalwork, and their ability to travel so distantly and they

competed to obtain the prestige goods that the Beaker people brought to the region. Over time, “...the continuing social compunction for indigenous groups to improve their access to exclusive Beaker goods would have increasingly encouraged emulation and the seeking of strategic marriage alliances...[as they] ‘bought into’ Beaker cultural values” (Needham 2005, 207).

Although there are some places in Britain, which Needham (2005: 182) points out, that have obvious Beaker domestic ware, such as at Sorisdale (Colonsay), there are problems with his approach to the adoption and use of Beakers, particularly relating to the Tyne-Forth region. Needham’s approach is based on the assumption that Neolithic people in Britain were more isolated, less mobile and had a much narrower range of contact with other peoples than the groups living in mainland Europe. It assumes that knowledge of people in far reaching areas did not begin until the ‘Beaker people’ connected them and set up trading outlets, however, the long term evidence for the region demonstrates this was not the case. Not only did ceramic styles from the Middle Neolithic onwards flow through the region from as far away as Orkney, Ireland and the European Atlantic façade, but the established sites that the early Beaker pottery is found on, that should pass as early colonies, have their origins in the Middle Neolithic and were inhabited until the Late Bronze Age. The preliminary results of the isotopic studies of the Beaker People Project show that in the Beaker period, some people, such as the Amesbury Archer and the Boscombe Bowmen, did travel far from where they grew up, but they also show that many ‘Beaker people’ did not move, and yet were no less ‘Beaker’ than the immigrants in their homeland (Evans et al. 2006; Evans et al 2012; Montgomery et al. 2007). It is of interest that these patterns are very similar to those found at Duggleby Howe in the Middle Neolithic.

In addition, there are examples of early Beakers in the study area that show similarities to examples from other regions than the Lower Rhine. At Bathgate and Lanton Quarry, the AOC early Beakers have very low carinated bellies (Figure 7.7), which draw similarities in shape to examples found at Truchen-er-Hroëk in Brittany and Men-ar-Rompel, Côtes – d’Armor (Figure 7.8). The base sherd, NMS X.HR 554 from Archerfield, is decorated with double rows of cord – a rarer use of the motif that parallels to Rogarte and Mane-Roullarde, both in Morbihan, and at two sites in Niaux, Ariège (Figure 7.9). The Ponteland Beaker has a higher, more angular carination with a wide mouth and a short stature, such as the vessel Needham (2005: 181) illustrates from Monsheim (Figure 7.10). Needham’s (2005, 181) example from Mallem shows the use of a similar, but unique, impressed motif in rows that is

found on EP 174 at Cairnpapple (Figure 7.11). What this would suggest is that the earliest styles of Beakers coming into the region may have had a more varied origin and their entrance could have been the result of more regular, short-term contact with people from many places along the North Sea trade routes.

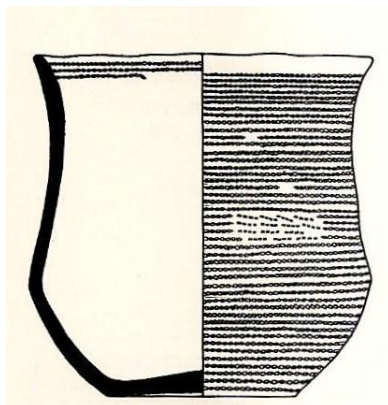


Figure 7.7: The vessel from Bathgate, Edinburgh, Midlothian (from Clarke 1970).

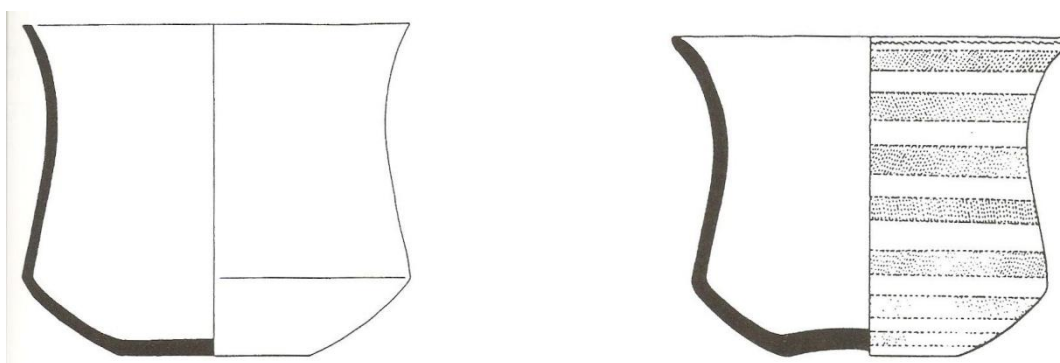


Figure 7.8: The vessels from Truchen-er-Hroëk, Brittany (left) and Men-ar-Rompet, Côtes-d'Armor (right) (from Salanova 2000: 241, 261).

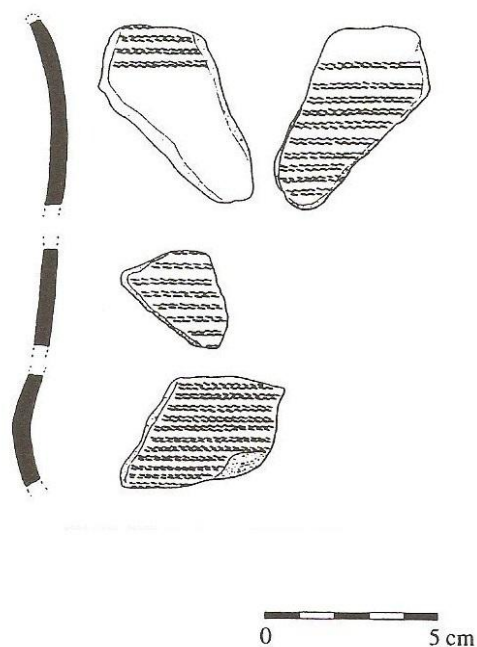
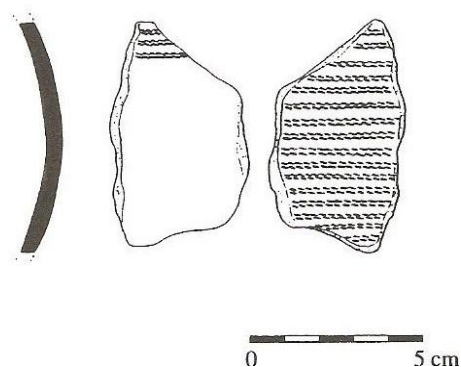
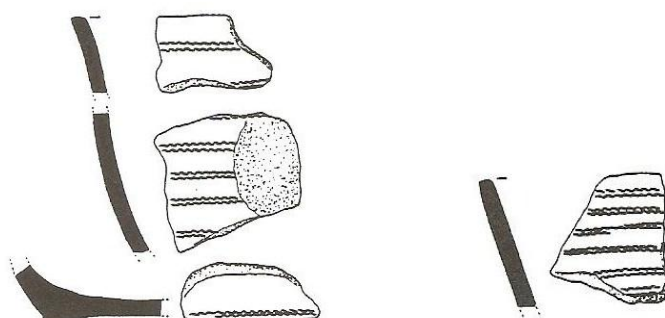
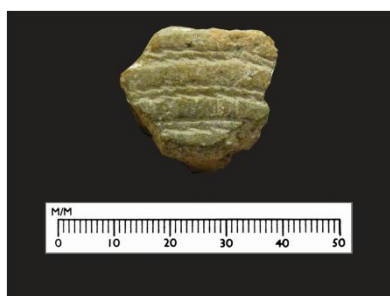


Figure 7.9: Double rows of cord on a sherd from Archerfield, East Lothian matches stylistically with those found at: Rogarte (above middle, from Salanova 2000: 252); Mane-Roullarde (above right, from Salanova 2000: 254); Niaux 1 (bottom left, from Salanova 2000: 346); and Niaux 2 (bottom right, from Salanova 2000: 347).

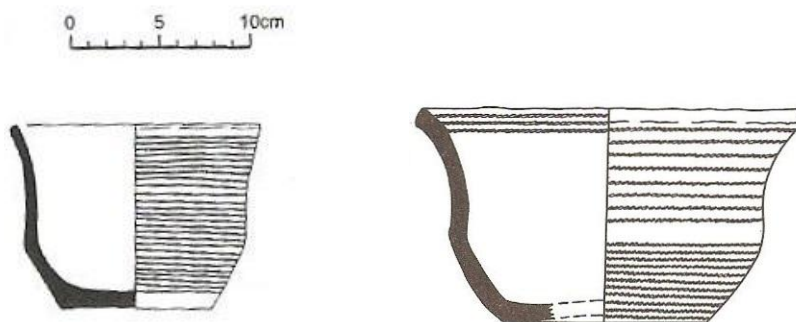


Figure 7.10: The Beaker from Ponteland, Northumberland (right) as compared to the vessel from Monsheim (left, from Needham 2005, 181).



Figure 7.11: A comparison of the Beakers from Mallem (left) (from Needham 2005, 181) and EP 174 from Cairnpapple, West Lothian (illustration from Clarke 1970)

This is the sort of image that is put forth by Laure Salanova in her study of French Beakers. Salanova's comparative analysis of European Beakers has demonstrated that throughout Western Europe, the spread of this type of pottery was more heterogeneous and not so 'strategic' as Needham's theory indicates (Salanova 2000: 193-4). The petrological work proved that the European Beakers were made locally, but their shared style denotes cultural contact. Salanova determines that the initial spread of Beakers has to have involved the movement of at least a few people in order for the craft to be taught so uniformly (Salanova 2000: 193). This very well may have manifested itself in the connections formed through marriage, as van der Linden (2007) proposes, and that certainly would account for the mixed domestic sites seen in the Tyne-Forth region at this time. But in order for groups to have met initially, some sort of exploration must have been going on and the impetus for this is

probably variable. People were probably interacting in many contexts: trade, migration, invasion, marriage, etc. Indeed, Salanova believes that once groups learned to make Beakers, changing styles could have spread as ideas and need not have involved the movement or relocation of individuals (Salanova 2000: 194). So greater contact might have caused regions to be linked stylistically whilst others created their own insular Beaker styles, which would explain why Beaker styles are heterogeneous in some areas and more homogeneous in others.

The assertion that the adoption of ‘Beaker culture’ was caused as much by locals striving to become ‘Beaker’ as Beaker people acculturated them, is flawed because it renders local Neolithic people as passive natives meeting dominant Beaker colonists. This attitude, which appears to be influenced by modern European ideas of more recent colonisations, is too simplistic. It suggests that Neolithic people, who were less mobile and less aware of the larger world, met the explorers who came to their land with superior technology and sought to become like them to have access to those things, but this does not necessarily fit the archaeology in this area. Salanova (2000: 194) argues that the key to understanding Beaker adoption is in the comprehension of the final (Late) Neolithic. It is pertinent that in the Tyne-Forth region there are no exclusive Beaker domestic sites. In addition, the multi-component Neolithic domestic sites that span the introduction and adoption of Beakers show only continuation of lifeways with Beakers being used primarily for burial. There does not appear to be two groups co-existing and, just as with the earlier periods, the new ideas that are adopted seem to be fitted into the existing culture, rather than the other way around. The evidence does not show an adoption of ‘Beaker cultural values’, but rather an adoption of an ideology surrounding death, whilst life continued as it always did.

In addition to this, it is probable that local Neolithic people were also going out from the region to trade, rather than simply waiting for foreigners to come to them. The transportation of individuals over long distances is known from the Early Neolithic and trade routes up and down the North Sea coasts were established well before Beakers (van der Noort 2010). Within mainland Europe, it is known that the movement of individuals and objects across very long distances intensified from the Early Neolithic onward, which leads Heyd (2012) to argue that the spread of Beakers simply displays the climax of a long-term process of cultural interaction. Fokkens (2012: 123) suggest that the very speed with which Beakers were adopted demonstrates that the trade links through which they travelled must have already been well-established. It is, therefore, possible that some of the adoptions we see, for example the style of Beakers, could have been the result of local people going out from the region and

bringing back ideas they had encountered elsewhere, as has been argued by Fokkens (2012: 117) for the ceramics at Biggar Common (Peeblesshire).

Towards a Narrative for the Tyne-Forth region

The archaeological evidence reviewed in this thesis, coupled with the analysis of the ceramics of the Tyne-Forth region, demonstrate a sense of continuity. Although ceramics form only a part of the material remains of these past people, it is informative because its presence is a constant on different types of sites over a long temporal sequence. It is for this reason that a clear understanding of the period can only be made by looking at the long term trends of the region and by placing any new traditions within the context of the greater range of human activity. Considering the entire sequence of events leading up to this contact and thereafter is essential to understanding which characteristics develop internally, which are brought in from elsewhere and how they mingle and endure. In addition to this, it is necessary to view the evidence in a balanced way by comparing what is known about burial and domestic practices in both periods, rather than drawing conclusions based on funerary evidence alone.

The earliest Beaker sites in the Tyne-Forth region tend to be at the same places that were used from very early Neolithic times. There are a few early Beaker burials that include *low-carinated* and AOC-style vessels, but these are not necessarily near the coastal domestic sites, suggesting that they are the burials of members of the group who lived in that area, for example, at Bathgate (West Lothian) or Drumelzier (Peeblesshire). Early Beaker sherds are found more consistently at Neolithic monuments. At Cairnpapple (West Lothian), early Beaker burials are found inside the circle, as are sherds of Beakers in the Red Chip Layer at Cloburn Quarry (Lanarkshire) when the monument was in-filled. This could be argued to represent “Beaker people” ‘closing’ the monuments and turning them into burial places as they dominated local cultures, as described by Bradley (1998), but then this explanation does not work for Eweford West (East Lothian), where Beakers were used in feasting and deposition at an Early Neolithic long mound in the same way as in Neolithic times (MacGregor & Stuart 2008: 89-91). Nor does it explain the non-funerary final phase at Blackhouse Burn (Lanarkshire) where AOC sherds were found under a rubble wall that was an enhancement of an existing Neolithic monument.

Part of the problem is that we do not know exactly how Neolithic monuments, such as henges and circles, were used in this area before Beakers. The assumption that they were gathering places for the living is based on what is known at similar monuments in southern England and it follows our association of the Neolithic with living, domestic and ritual sites contrasted to the Bronze Age burial monuments. The henges in the Milfield Basin are different in form to those of other parts of Britain; they have varying numbers of entrances and different internal features. Cairnpapple follows a similar trend to the henges in Milfield Basin as its henge has two opposing entrances and a ring or arc of pits that held uprights (stones in this case), but the site also had a dolmen, which is not seen in Northumberland, but is found in other parts of Scotland. The burial of human remains at these monuments seems to appear ‘suddenly’, but without the knowledge of the use history of the sites, it is difficult to place this development into its context. It is possible that if these monuments were gathering places for people to remember their dead in the Bronze Age, they may have had a tradition of this association beforehand in the Neolithic: perhaps as places where the ashes of people were scattered - an action that would not show up archaeologically. The Late Neolithic funerary data is scant in this area and certainly no inhumations are known associated with Neolithic pottery, but ash and burnt bone (that were interpreted as a burial) were found with an Impressed Ware bowl at Lookout Plantation (Monaghan 1995) and burnt bone was associated with Grooved Ware at Yeavinger (Hope-Taylor 1977). In addition, a very early pyre was found under burial mounds for Beaker-like inhumations at Teinside (Roxburghshire) (Rosehill 1868-9). Thus, it is possible that in the Late Neolithic the dead were cremated. If it is the case that henges in the region were sites where Neolithic people conducted funerary activities, then it would place the use of early Beakers at these places within a longer-term cultural continuation. Indeed, when the first Beakers arrive, they were used at Cairnpapple and Cloburn Quarry in association with cremation burials in the same way as in the Milfield Basin where the burial of cremated remains were found with local-style pottery. It would seem that the greatest new tradition that arrives with Beakers, then, is the construction of mounds, but even this appears to have been personalised by locals before a full move to typical ‘Beaker’ burial. Of the mounds that begin with early Beakers, several sites begin with the primary burial of undiagnostic coarseware pottery (in the case of Skateraw (East Lothian)) either alone or in association with early Beakers (Knock Hills, (Roxburghshire) and Drumelzier (Peeblesshire)). Clearly, the typical inhumation burial with a Beaker and associated artefacts is adopted in this region whole-heartedly and fairly quickly after its

introduction, but it seems that this was much more natural a choice than has been suggested and it was a process rather than a break in tradition.

An enduring legacy

It is interesting that so much significance is placed upon the arrival of Beakers as a foreign intrusion and yet, when Beakers and Food Vessels went out of use, and a very different form of burial was practised, it is largely seen as a change in ideology adapted by local people. Perhaps it is because the domestic pottery, post-1700 cal BC, continues separately from the funerary urns at the same sites and even though the pots change, burials are more and more commonly placed in the same mounds and in groups that extend back to the Beaker and Food Vessel phase. And yet, it should be noted that with Vase Urns, very different actions are being undertaken: the cremated remains are being placed in a very different kind of vessel that is designed to be inverted. In more cases than before, the remains are of more than one individual, and the use of accessory vessels comes into play. Clearly, this tradition involves an ideology different from before and yet we link it more easily to the past. It is possible that this might be because there are so many more examples of the vessels available from both the earlier and later phases, that this transition can be put into perspective.

Burgess' (1995) study of the domestic pottery that is contemporary to the burial traditions indicates that, for the Tyne-Forth region, Case's (1995) argument does not hold up because the vessels selected for burial were not taken from the domestic repertoire, but were made especially for funerary purposes. So it would seem that in this region, the attitude towards funerary pottery was different to that of domestic wares. Whereas vessels placed with the dead were carefully formed and decorated to tradition, this adherence to tradition was not as important for mundane, everyday pots. And perhaps it is this, especially, that links all of the traditions and tells us something important about the Tyne-Forth region as a whole. Although local territories existed and the area would have been subdivided, the entire region was at a crossroads along which new ideas and objects travelled and so people were open-minded to new things whilst maintaining their own way of life. Clearly, the funerary traditions and ceramic types associated with them were adopted and care was taken to maintain them, but because these traditions were not developed here, they did not have origins that might be reflected in the domestic sites.

The Impressed Ware shows that local styles that were made and used over the entire Tyne-Forth region, at least at this level shows an identity that people shared that was separate to better known places, such as Yorkshire. But at the same time, vessels that adhered to the Mortlake and Fengate styles were also made, connecting the Tyne-Forth region to the rest of Britain. This continued with Grooved Ware as the substyles are recognizable, but local combinations of their traits can be seen repeatedly at Late Neolithic sites. The arrival of Beakers at sites that had been used since the Middle Neolithic and the subsequent adoption of new burial practices that continued to evolve through the urn traditions reflected both national trends and a continuity of local lifeways. It is in this that a glimpse of a loose, regional social identity, or ethnicity, might begin to be seen. The ceramics in the Tyne-Forth region generally follow the traits required to be able to place them within their national tradition. In this way, the people in this region can be said to share some form of *isochrestic style* (a way of making pots out of all possible ways) with other groups living in Britain and continental Europe. But it is the very nature of ethnicity that allows a person or group to be part of a larger social whole, but maintain membership with a subgroup as well (Lucy 2005). The fact that the ceramics demonstrate traits that set them apart from these generalisations, indicates the groups in this area, as in other areas, had their own ethnicity that they identified with beyond the general ‘Neolithic’ or ‘Bronze Age’ image we recognise. They were aware of groups much further away and had well-established links to places outside their region. This part of Britain was no backwater regardless of where the styles were coming from, and the people here were very much a part of the movement of ideas and were up-to-date on the latest trends. It is with this as the background, then, that the emergence of new types of pottery and burial practices in the Bronze Age does not appear quite so extraordinary.

The ‘transition’ between the ages we have created to understand the past is a concept that we have placed upon it and, with a preconception that life must have changed, the strong sense of continuity seen in the archaeological evidence has been often ignored. It is true that burial changed and new forms of structures were built, new objects made and traditions of ceramics developed, but it must be remembered that this occurred over many centuries, and where change may have been dramatic in one region, it does not necessarily mean that it was so elsewhere. Although some new ideas may have been adopted suddenly, others were interpreted and accepted over various amounts of time. What we see archaeologically are simply moments in time and space that we attempt to link together in order to interpret past action. This project has been designed to consider the long term trends to place the evidence

into as realistic a perception of the past as possible. In addition, an attempt has been made to steady the imbalance, which favours domestic and monumental evidence for the Neolithic and funerary remains for the Bronze Age. And the results have been compelling. What is demonstrated here is a region that is very much a part of the Neolithic and Bronze Age, but is also distinct. Local groups interacted and changed, but maintained their identities and, as they moved from using stone to metal, their daily lives continued and their dynamic cultures unfolded.

EPILOGUE

The research presented in this thesis has focused upon the two-fold issue of boundaries. It has considered the nature of cultural boundaries in the past: how they formed through social interaction, how they were maintained over time and how this might be reflected in the archaeological record. It has also examined the boundaries within the study of archaeology that have been created in the present: the core-periphery model, the Three-Age system, and the modern political boundaries that influence how we view the past.

This project was designed to evaluate the evidence from the Tyne-Forth region for cultural interaction in the Neolithic and Bronze Age through the examination of the ceramics found on all types of sites. Although the evidence for interaction was most evident in the Late Neolithic/Early Bronze Age period when several ceramic types co-existed, the inclusion of the earlier and later wares (Impressed Ware and Urns) allowed the results to be placed into context. What has resulted is an image of the Tyne-Forth region at the time of the introduction of Beaker pottery. It appears that already existing, long term, international networks were increased, maintained and strengthened, and new ideas, particularly about death and burial, were adopted, but lifeways continued in a more local trajectory of development. This is expressed especially in the domestic pottery style that was found on domestic and ritual sites.

Perhaps what is most important, though, is what this research has demonstrated about the flaws in the ways we have approached the past in our interpretations. Regionality is something that has been out of fashion since the beginning of the Post-processual period, and yet the age old, core-periphery model has persisted. Although, in the past twenty years, the greatest emphasis in analysis has been on agency, and especially the individual, "...when personhood is envisaged as relational, the scales over which it might have been distributed are still relatively rarely discussed" (Whittle 2012: 147). Even when this is done, it is usually based on the generalisations known for the 'core areas' of Wessex and Orkney. Thomas' (2010) recent evaluation of the spread and meaning of Grooved Ware is an example of this. It is for this reason that a concerted effort to avoid constant comparison with Wessex, Orkney or the Boyne Valley has been made in this research and a consideration of other parts of northwest Europe has been included. It is clear from the results that the Tyne-Forth was home to autonomous groups that played their part in the general 'Neolithic' and 'Bronze Age'

traditions they shared with other groups, but did so in their own way, and it is also clear that this was not ‘peripheral’. Thus, the way in which we view the past needs to be reviewed.

Although a system of some sort is necessary to organise archaeological remains in discrete periods, our reliance on the Three-Age system has often clouded our understanding of the past. The focus on the adoption of Beakers at the beginning of the Bronze Age has long caused archaeologists to believe that the transition from the Neolithic to the Bronze Age was more significant than it probably was. Images of the colonisation of local, stationary native peoples, by worldly, itinerant, Beaker-using people have persisted for this period. It is hoped that what this research has shown is that a broader perspective needs to be taken when considering the introduction and spread of Beakers. The events and lifeways of people, before Beakers, need to be considered in a longer timeframe and the archaeological sites on which Beakers are found must be compared to like sites before they were introduced, as well as to different types of contemporary sites on which Beakers were not used. Thus, funerary sites in the Bronze Age need to be compared to funerary sites in the Neolithic, as well as to domestic sites in the Bronze Age and vice versa. It is only by considering all of the contextual evidence that a realistic image of any period may be formed.

Finally, although it has been continuously acknowledged that the Anglo-Scottish border did not exist in prehistoric times, the modern presence of this border continues to be problematic when studying past remains in the area. The data from this research supports only that there were general differences at the very northern and southern ends of the study area (which would be probable) and there appear to be different interpretations of burial practice in the uplands compared to the areas near the coast, but modern archaeology has been set up in the past two centuries to respect the division of the River Tweed. In future, the fora for communication that have been strengthened by the Tyne-Forth Prehistory Group need to continue. It appears that things are moving in the right direction, but concerted efforts will be necessary amidst the modern political situations that are transpiring between England and Scotland.

Future Research

This research, although encompassing a large amount of data and analysis, forms only the beginning of much wider study of the remains found in the Tyne-Forth region. The database

of information that has resulted from this work is now ready for dissemination and it is anticipated that it will be published online as an interactive resource for archaeologists working in the region and for ceramics specialists working further afield.

At this point, there is not enough information to conclude where different groups were living and how their boundaries may have been defined and redefined. A petrological analysis of the pottery to consider clay recipes and sources for materials could be very informative about cultural areas, either within one tradition in a shorter archaeological timeframe, or by comparing traditions. Moreover, a case study of how vessels were used at several types of sites within one tradition, using residue analysis, remains a prospect for future work. This could then be expanded to consider sites in neighbouring regions, particularly on the opposite shore of the North Sea.

The difficulty in understanding the archaeological remains from the Tyne-Forth region lies in the poor preservation of many contexts. It is an area that has not lent itself well to preservation and remains lacking in a clear chronology. Cultural boundaries are not static edges of a group's territory and so to understand them as areas of cultural interaction, a greater dataset will be necessary to identify change and hybridisation. This must include not only more artefactual remains, but also more secure radiocarbon dates. A better chronology would enable an understanding of the response of people in this region to new types of pottery, as well as the indigenous development of potting as a craft. This would be of particular interest to the current debates surrounding the adoption and impact of Beakers in the third millennium BC.

It is hoped that the conclusion of this thesis will really represent more of an introduction to future study. This research has taken a first step towards the recognition of the existence of regionality and cultural boundaries between the River Tyne and the Firth of Forth, as displayed in the ceramic remains. Individuality has been shown at several scales and the area has been placed within the context of the traditions known elsewhere; however, the results in this thesis also show that there is a need to continue this sort of analysis. The idea of cultural regions and boundaries is not necessarily new, but considering them from a perspective that takes into account the latest social thoughts on ethnicity, identity and human interaction with materials, as well as the chaîne opératoire and the information that scientific methods can provide, is an emerging approach (Jones 2012; Whittle 2012). As it matures, it is anticipated

that so too will our understanding of the past and, in the process, reveal more about what it means to be cultural.

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APPENDIX 1: THE SITES OF THE STUDY AREA

Introduction

The Tyne-Forth region is one that tends to yield sparser ceramic finds than other parts of Britain. This is partially caused by poorer preservation and, to some extent; it is due to the more limited archaeological work that was done here in until recently. This project, however, includes the assemblages of 243 sites that date from the Late Neolithic to the Middle Bronze Age periods. These sites are part of a much larger group in the study area; however, the sites that did not contain pottery will not be included in this study since this project is focused on the pottery of the Tyne-Forth region. The ceramic sites include a larger proportion of funerary sites, particularly in the Bronze Age, but also domestic sites, ritual sites, and pit alignments.

Many of the study sites were re-occupied over time and produced ceramics from more than one tradition and this has made the organisation of this literature review and interpretation thereof more challenging. The presence of new types of ceramics was traditionally seen as the dominance of a new people; however, it is now known that these new types of pots simply mark points in prehistory over a long term trend. They are Charles Darwin's (1859) finches who originate from opposite ends of the island and look very different from each other, but simply represent the opposing ends in a continuation of change. With the discovery of more pottery from the beginning of the Late Neolithic to the Early Bronze Age, local transitions in ceramic style are becoming more visible and it is this that this thesis is meant to display. Consequently, this literature review is divided into the usual broad ceramic categories: Late Neolithic Impressed Ware and Grooved Ware, Late Neolithic/Early Bronze Age regionally-inspired pots, Beaker, Food Vessels and Early/Middle Bronze Age Urns (including Vase Urns, Collared Urns, Cordoned and Bucket Urns).

Within each class, the sites are then listed and described in their county groups, roughly arranged north to south so that comparisons across space in a single time period can be more easily made and trends will be more obvious to the reader. Where a site is multi-period, it is described fully in the section for the earliest form of pottery found there. This is so that the sense of its continued use will not be lost, as it might if the description were divided between sections.

Each site is numbered and this assignation correlates to the site numbers on the ceramic tradition maps (Maps 6.1-6.9). The data that were collected from the pots is listed in the results Tables 5.1-5.10 and are described in more detail in Appendices 2-11. The numbers that are assigned the pots in Appendices 2-11 correlate to the numbers in the tables, but since the appendices also include vessels that were not available for study, the numbers in the tables are divided between pots that were examined (Tables 5.1-5.10) and those that were not studied (Tables 5.11-5.16). Note that the data in Tables 5.11-5.16 are the conclusions of the researcher who analysed those vessels and because this author did not examine them, this has not been changed.

Late Neolithic Impressed Ware (Map 6.1)

1. Hedderwick, East Lothian

The site of Hedderwick Sands is on the southern bank of the River Tyne in East Lothian (not to be confused with the River Tyne in Tyne & Wear). It consisted of a spread of artefacts exposed by wind that measured 229 m x 27 m (Callander 1928-9: 85). At the western end of the site, Beaker sherds and two rim sherds from a cinerary urn were collected. Callander (1928-9: 85) lists the inventory from the site as follows: leaf-shaped arrowheads, barbed-and-tanged arrowheads, other flint tools and stone axes, but does not indicate where these are found. He specifies that sherds from 47 vessels were found apart from the Beaker and cinerary urn in the centre of the spread and these bear characteristics suggesting a Late Neolithic/Bronze Age transitional date (Callander 1928-9: 86).

In a note of donation and purchases for the museum, Neolithic and Bronze Age potsherds, as well as four hundred flints and, "...various objects of stone" (PSAS 81: 189) are listed from this site. These are identified as the artefacts described by Callander.

A second note of donation four years later lists 'Neolithic B', or Impressed Ware sherds as having been acquired. The context or associations of these sherds are not mentioned, but these may be the 'late Stone Age' sherds to which Callander refers in his report.

2. Overhailes, (East Linton), East Lothian

On a gravel terrace near East Linton, the Overhailes site (Figure 6.1a) produced habitation evidence dating from the Mesolithic (McGregor & Stuart 2009: 69); however, it is the Middle and Late Neolithic remains that are of interest here. The earliest remains comprise stakeholes in a horse-shoe or circular alignment and associated pits in a yard area adjacent to this (McGregor & Stuart 2009: 70). The stakeholes contained wood remains, which suggest a structure with supported wicker walls. MacGregor & Stuart (2009: 70) conclude that this structure was ephemeral and their illustration most resembles the wigwams built by the Iroquois in historic times; however, since it is also stressed in several places in the report that ploughing had truncated the features, this conclusion is treated with caution.

The two large pits in the adjacent yard both contained two fills each of domestic debris, including knapped flints, a polished stone axe, sherds from 11 Impressed Ware vessels (many with crusty residues), burnt material, including burnt animal bone and charcoal (MacGregor & Stuart 2009: 70). Three other pits were also found to the south of these that also contained burnt food remains, pottery sherds and charcoal.

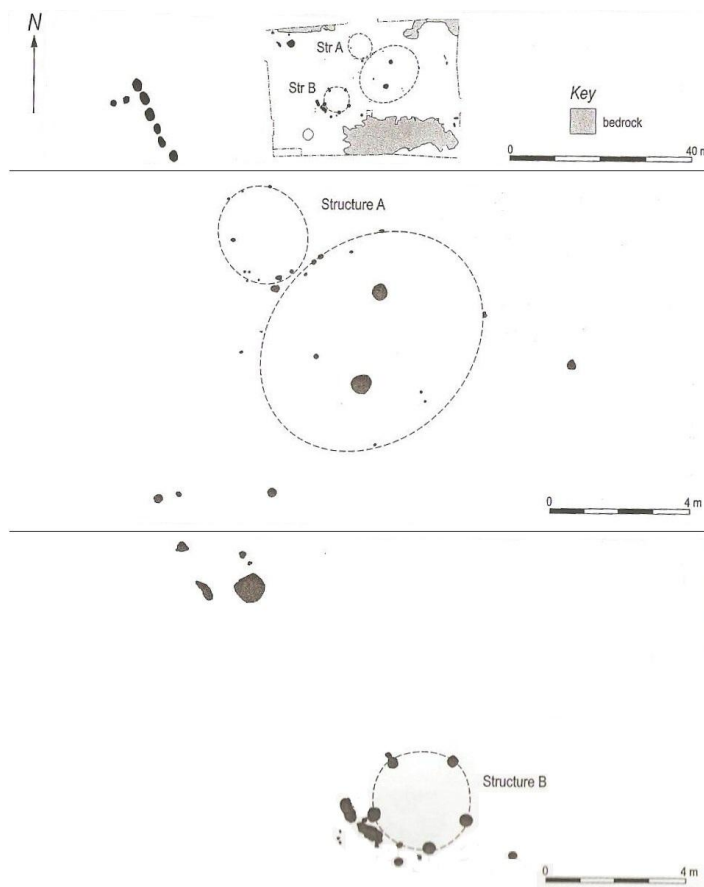


Figure 6.1a: Overhailes Farm, site plan (from MacGregor & Stuart 2009, 71)

An alignment of 8 pits was found 15 m from this structure to the west. Each was 2.8 m in diameter and 0.4 m deep, but no material was found that could place them chronologically (MacGregor & Stuart 2009: 79).

Near to this were a group of three pits and a linear feature, which seem to respect the pit alignment, but also could not be dated. Two cists were also found to the west of the pit alignment that had trace amounts of cremated bone, and pit 241, a stone-lined feature to the east, contained hazel, charcoal and oat (MacGregor & Stuart 2009: 79). A radiocarbon date of 2350-2040 cal BC was determined for this feature.

A ring of five posts were found 15 m from these features to the southeast of the site (MacGregor & Stuart 2009: 79). All of the posts were deeply-set oak timbers that were 0.7 m in diameter. Each contained a post-pipe and the same stone packing. Two post holes were also found just outside the circle (MacGregor & Stuart 2009: 83). Within the fills were burnt wood and food remains, including cereals, hazelnut shells and seeds, and two abraded sherds of pottery. Two radiocarbon dates of 2340-2040 cal BC and 1930-1740 cal BC were determined from short-lived species of wood charcoal. This group was interpreted as either a timber circle or a structure.

3. Knowes Farm, (East Linton), East Lothian

During the A1 excavations, a pit alignment was found at Knowes Farm (Figure 6.2a), near East Linton, which comprised 12 evenly-spaced pits over 12 m of space (Shearer & McLellan 2009: 47). At either end of the alignment were a cluster of three smaller pits. The western cluster had pits 005, 026 and 008, which all held the sherds of three Impressed Ware vessels in charcoal-rich fills. One vessel was distributed evenly between the three pits (Shearer & McLellan 2009: 47). Radiocarbon dates from these pits were determined to be between 3620-3090 cal BC (Shearer & McLellan 2009: 51). In the eastern portion of the alignment, pits 015, 017 and 020 had trace amounts of charcoal. The pits of the pit alignment had silty fills with some charcoal. It is possible that they held posts, but Shearer & McLellan (2009: 53) lean away from this since their wide, open bases are not typical of post pits.

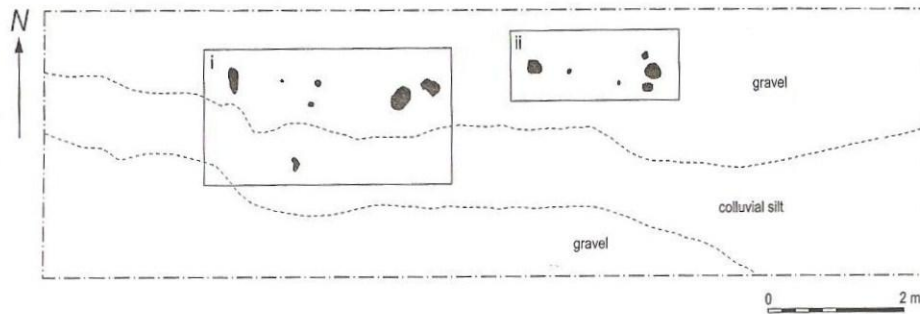


Figure 6.2a: Knowes Farm, site plan (from Shearer & McLellan 2009, 48)

4. Dalkeith, East Lothian

Henshall (1964-66: 312) records four sherds from a single vessel that were found in the late 1930s, which were donated to the Museum of Scotland in 1966. The provenance is listed only as Woodburn Housing Scheme, Dalkeith.

5. Meldon Bridge, Peeblesshire

Meldon Bridge is located on an important natural crossroads, surrounded by tall hills and escarpments (Figure 6.3a) (Speak & Burgess 1999: 2). It is here where the most easily traversed passages lead to Edinburgh and the Firth of Forth, Glasgow, and to the Tweed, which eventually empties into the North Sea at Berwick. Moreover, the site is located on a huge gravel terrace where the Lyne Water and Meldon Burn meet in what would have otherwise been a marshy area, so it is of no coincidence, then, that this has been an important pass to control since since the prehistoric period.



Figure 6.3a: The site of Meldon Bridge, Peeblesshire, is located overlooking the Meldon Burn that flows into the Tweedsmuir valley.

In 1974, a rescue excavation was conducted in anticipation of a road widening scheme along the A72 in Peeblesshire to investigate a pit alignment that had previously been identified by St. Joseph in an aerial survey of the region (Speak & Burgess 1999: 2). The work was continued in 1975, and then again in 1977, ahead of a water pipeline that was to be installed (Speak & Burgess 1999: 4-6). What was thought to be a pit alignment, however, quickly revealed much more and the resulting report describes a multi-component palisaded enclosure with ritual, domestic and funerary activity dating from the Neolithic onwards.

The site is comprised of several types of features: groupings of pit features that date to two event horizons in the Neolithic; a timber palisade that encloses the area of pits; burials from the Neolithic/Bronze Age transition; a linear cemetery with new forms of cremation burial; and an Early Bronze Age cemetery with Cordoned Urns (Figure 6.4a) (Speak & Burgess 1999).

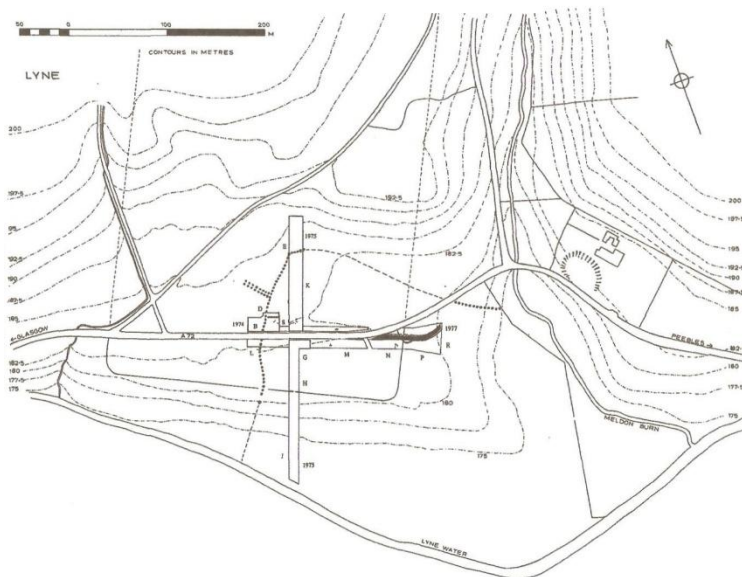


Figure 6.4a: Meldon Bridge site plan (from Speak & Burgess 1999: 5).

Pit Clusters

Although erosion of the site has been heavy and any features observed only represent the truncated bottoms of the original archaeology, associations were able to be made (Speak & Burgess 1999: 8-9). A cluster of three pits was discovered in Area F (Speak & Burgess 1999: 14). Although the first, F23, contained nothing, F24 held one sherd from pot 26, and F40 had hazelnuts, sherds from pots 63-69. A date of 3650-2900 cal BC was determined for F40.

In Area N (Figure 6.5a), a group of six pits was found (Speak & Burgess 1999: 14):

N40 – sherds from pots 38-41 were found, along with charcoal dating to 3650-2900 cal BC.

N43 – sherds from pots 42 and 43, mixed with hazelnuts and charcoal with a date of 3700 – 3000 cal BC.

N44 – 25 sherds from pots 44-46.

N45 – sherds from pots 48-53 were found amidst burnt bone, chert and charcoal, which dated to 3800-3050 cal BC.

N47 – a natural depression with a sherd from pot 54.

N48 – pit with a fill of soil, hazelnuts, and a sherd from pot 55.

The Area S cluster (Figure 6.6a) consisted of three pits with similar fills (Speak & Burgess 1999: 12):

S13 – pit containing burnt hazelnuts, sherds from pots 57-60, and charcoal, which dated to 3550-2900 cal BC.

S14 – pit filled with soil, mixed with charcoal that dated to 3650 – 2900 cal BC, sherds from pots 58-64, a quartzite pounder and a greenstone axe.

S15 – pit with a fill of soil and sherds from pot 58. Charcoal yielded a date of 3400 – 2650 cal BC.

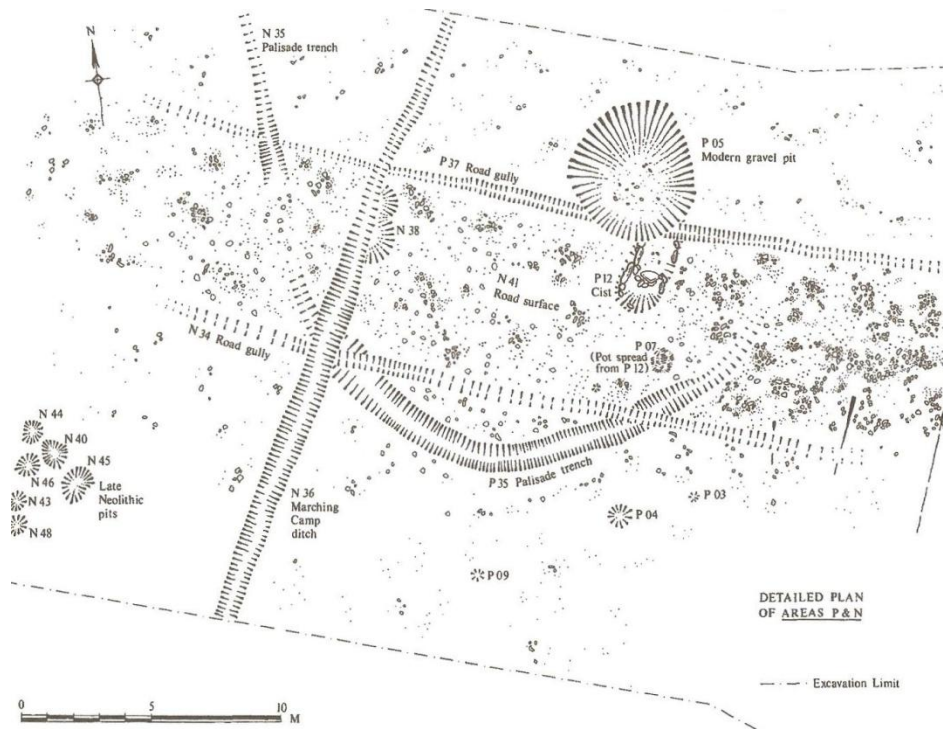


Figure 6.5a: Meldon Bridge, area N plan (from Speak & Burgess 1999, 47)

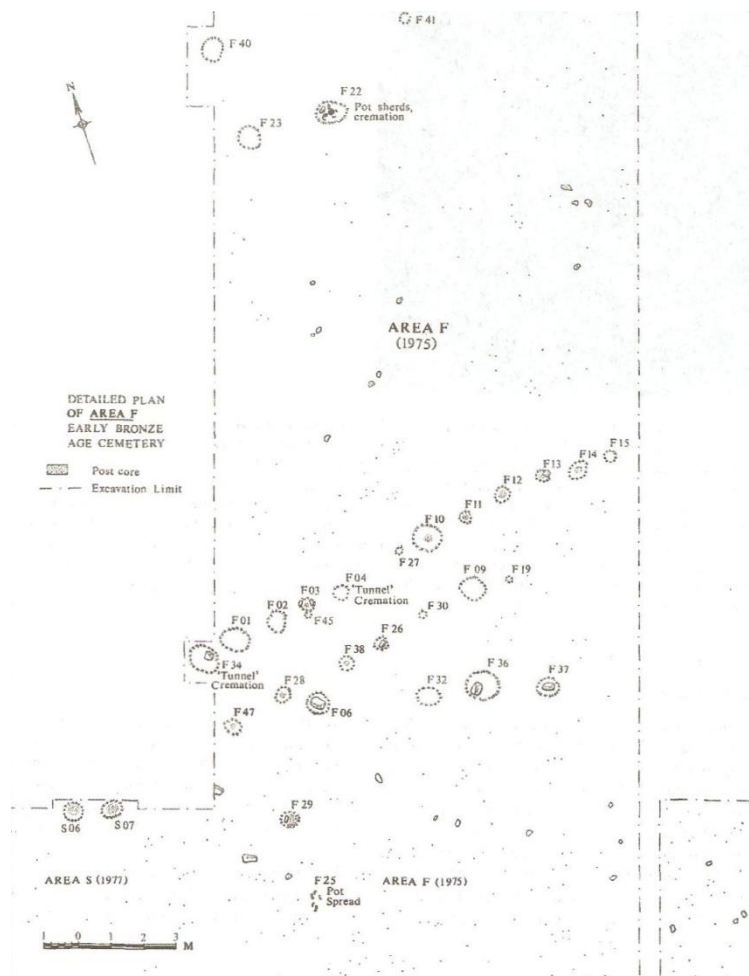


Figure 6.6a: Meldon Bridge, area S (from Speak & Burgess 1999, 34)

In Area B (Figure 6.7a), a contemporary group of pits was found with similar radiocarbon dates, deposits and sherds of the same pot in three of the pits (Speak & Burgess 1999: 12):

B10 – a slight depression with a rim from pot 8.

B12 – sherds of pot 7 were found pressed into the sides of the pit wall, decoration-side downward. The fill comprised of soil, burnt wood and burnt hazelnut shells. A date from the hazelnut was calibrated to 3350 – 2450 BC.

B14 – a pebble-lined pit with sherds of pot 1 were found pressed into the sides. More sherds from pots 1, 8-14 were found in the fill.

B15 – the fill from this pit was composed of soil, mixed with burnt bone fragments, a flint saw, and sherds from pots 15 and 8.

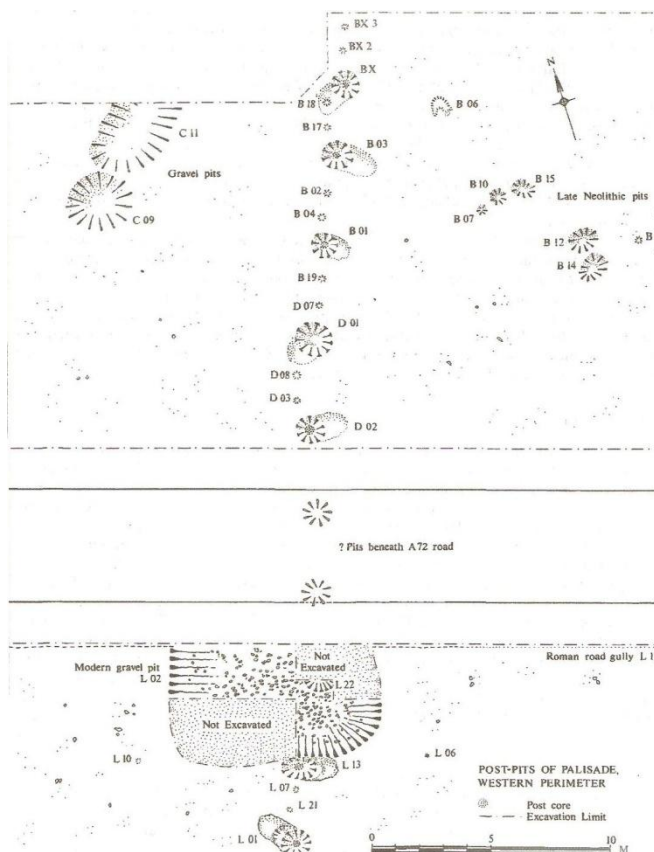


Figure 6.7a: Meldon Bridge, area B plan (from Speak & Burgess 1999, 16)

Also in Area B was feature B06, which was a pit filled with soil, charcoal, dating to 2900-2300 cal BC, and sherds from pots 3-5. Although the style and fabric of the ceramics is consistent over time, the slight differences in rim formation, along with this date, suggest that this pit is from a separate component (Johnson 1999: 53). This makes Area B unique as Areas F, N and S are all largely contemporary (Speak & Burgess 1999: 15).

Wooden Palisade

Surrounding these clusters of pits was the row of pits that originally drew attention to the site. The timber palisade surrounded the site on its north and eastern sides, its south and western ones being naturally bound by the cliffs of the promontory on which it sits (Speak & Burgess 1999: 3). It consisted of large uprights, estimated to have been about 4 m high,

interspersed with two smaller timbers. A radiocarbon date, taken from the post-pipe of one pit, dated to 2500 – 1750 cal BC (Speak & Burgess 1999: 20). The pits were dug well into the hard, gravel surface and the palisade would have required much effort to dig. However, the sophistication of the construction is best displayed in the way ramping was used to set the timbers: “...if the ramps pointed in different directions, the contrary forces exerted by each post would tend to cancel out and, in effect, the posts would hold each other up” (Speak & Burgess 1999: 17). Clearly, the people who built the enclosure at Meldon Bridge had a sophisticated understanding of their material and its architectural constraints. This is something which evokes questions around the lack of structural remains from the Neolithic sites in the region and if it truly reflects the past reality – especially since, in most cases, Late Neolithic pits and postpipes are heavily truncated and affected by later ploughing.

A double row of uprights was also observed leading from the palisade outward from the site for some 27 m (Speak & Burgess 1999: 24). The purpose of this was not determined, but Speak & Burgess refer to it as ‘the Avenue’, suggesting it might have been an entrance way of some sort.

Neolithic/Bronze Age Transitional Burials

Within the perimeter of the palisade were found several burials. Of particular note were those of the K-complex, a circular arrangement of cremation burials, with a larger one in the centre. Each pit that had stake holes along the edges of one or both sides (Figure 6.8a) (Speak & Burgess 1999: 26). It is thought the stake holes may be the remains of platforms that were raised over the graves, or screens marking them. One radiocarbon date of 2900-2100 cal BC was obtained .

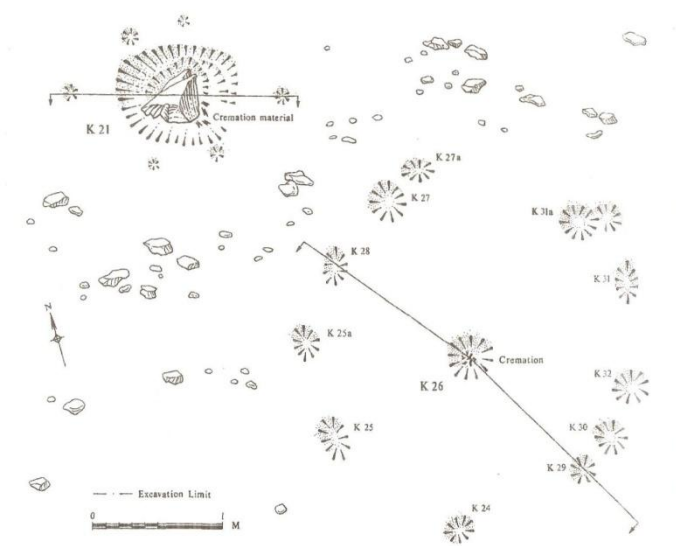


Figure 6.8a: Meldon Bridge, K complex plan (from Speak & Burgess 1999, 28)

Linear Cemetery

To the northeast of the site, also within the perimeter of the palisade, were two rows of pits with post-pipes, some of which contained cremation burials. Of particular interest were features F04 and F34 that had ‘tunnel burials’, where the cremated remains were put in a tunnel dug into the side of the pit so that the proceeding timber post would not interfere with them (Speak & Burgess 1999: 35).

Twenty-five meters to the south of this were a two cremation burials, each in cists with Bucket Urns inverted over the remains (Speak & Burgess 1999: 38). Two other cremation burials were also found in a pit in two cinerary urns, placed side by side (Speak & Burgess 1999: 41). Speak & Burgess (1999: 42) note that the style and fabric of these urns are strikingly similar to those found at the contemporary Green Knowe site (Early/Middle Bronze Age – Collared Urns, #29).

The Meldon Bridge site remains one of the most important in the study area as it has the largest assemblage of Impressed Ware, a ceramic tradition drastically under-represented. Its multi-component nature allows for the longer-term prehistory of the region to be considered and for connections to other sites in the immediate region to be made. Since it lies on an important crossroads, it is also very important when considering territories.

6. Lookout Plantation, Northumberland

In addition to the report on the Lookout Plantation site, a note at the end of the same journal describes a find made near the house during the same rescue project. Within a pit, containing an “ashen white sand interspersed with numerous flecks of charcoal” (Monaghan 1994: 273), sherds from a heavy vessel were found. Monaghan (1994: 274) concludes that the vessel is an early form of the enlarged Food Vessel tradition and compares it to specimens found at the Meldon Bridge site in Peeblesshire, Carnaby Top Site II in Yorkshire, and Brackmont Mill, Fife. He believes that because the surface of the pit and its edges were stained red from *in situ* burning, this is the remains of a cremation event (Monaghan 1994: 273).

7. Crookhaven, (Ford), Northumberland

In a short paper in the *Yorkshire Archaeological Journal*, Ian Longworth describes five sherds of Impressed Ware that were found near Ford, probably close to Crookham, in Northumberland. Captain Carpenter of Ford Cottage had found the ceramics in his wanderings and had brought them to Canon Greenwell (Greenwell & Rolleston 1877; Longworth 1969: 258). Although their provenance is not known, Greenwell (1877) suggests that they may be related to other findspots in the same area where urns were found in association with jet necklaces. Since it is now known that these are Impressed Ware pieces, rather than Early Bronze Age urns, the assumption that they were from funerary contexts is tenuous. It is likely they were domestic remains.

8. Red Scar Bridge, (Ford), Northumberland

One of Captain Carpenter's finds that Longworth re-examined is said to have come from Red Scar Bridge and Greenwell notes that he went to the findspot to inspect and found a further two sherds; however, these were subsequently lost and are not currently in the collection (Longworth 1969: 260).

9. Heatherwick, (Elsdon), Northumberland

Two sherds of Impressed Ware are listed in the museum records as having come from Heatherwick (Tait 1968: 275). They were found by Mr. W. Percy Hedley and originally described as Food Vessel sherds, but are confirmed by Tait here to be of Late Neolithic origin rather than Early Bronze Age.

10. Old Town Farm, (River Allen), Northumberland

A note of acquisition to the Museum of Antiquities lists a sherd of pottery found by Mr. J. P. Gillian (Tait 1968: 279). It is thought it was found on or near the Old Town Farm. Tait (1968: 279) confirms it is a body sherd from an Impressed Ware vessel.

11. Cheviot Quarry, (Milfield), Northumberland

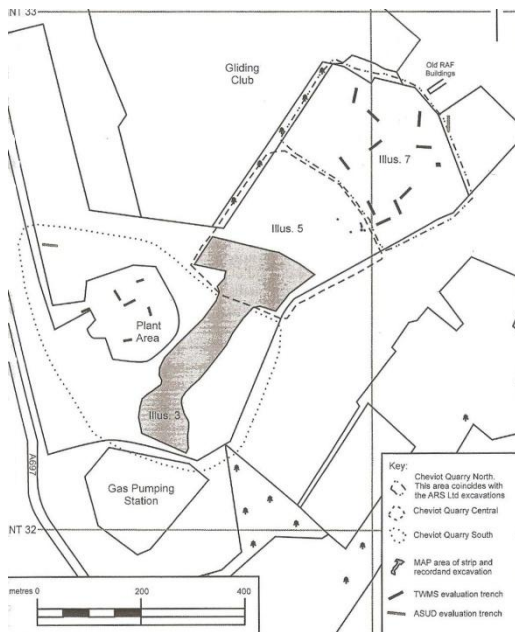


Figure 6.9a: Cheviot Quarry site plan (from Johnson & Waddington 2008, 111)

The Cheviot Quarry site was tested and excavated by three archaeological contract companies over thirteen years, from 1993 to 2006 (Figure 6.9a)(Johnson & Waddington 2008: 110). In 1993, 17 test trenches were excavated by ASUD in which there were pits, postholes and a gully. The finds included 28 sherds of Carinated Bowl ceramics from a single pit and a further nine sherds and 43 fragments of Impressed Ware from another pit on the southeast of the site.

The 2003 watching brief was undertaken by MAP and 109 prehistoric features were found at the southern part of the site, which were identified by ceramic sherds in the uppermost portions (Johnson

& Waddington 2008: 110). Further work at the north of the site produced 50 archaeological features, which were excavated and produced Neolithic and Bronze Age pottery and flints.

It was then in 2003 that ARS Ltd. did the watching brief for Tarmac, the quarrying company that owns the site, and then excavated it in 2005 (Johnson & Waddington 2008: 112). This revealed extensive Neolithic and Bronze Age habitation, as well as significant Anglo-Saxon remains.

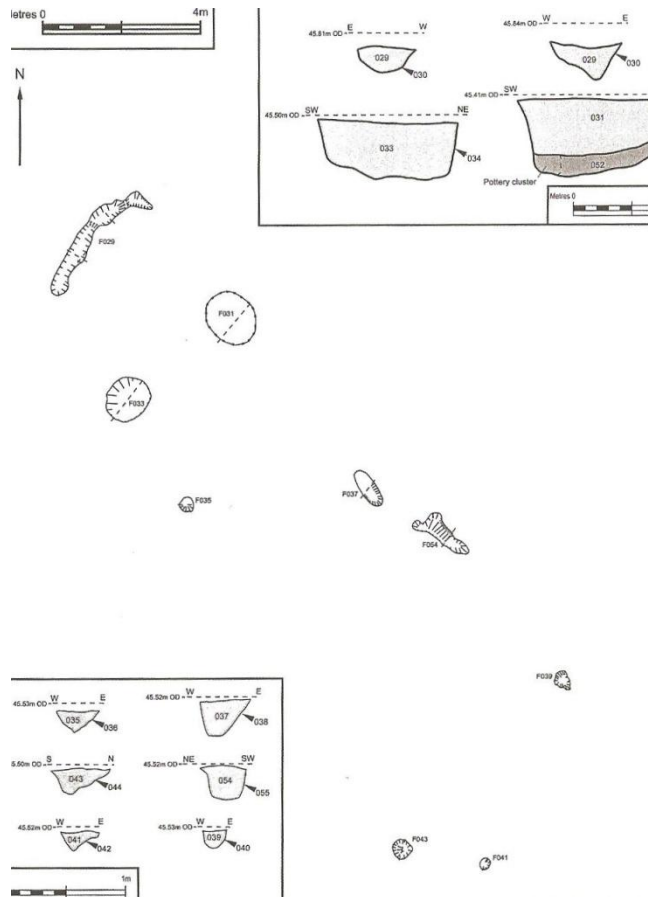
Neolithic

The earliest finds at the site date to the Mesolithic in the form of residual flint material on the surface, but it is with the Neolithic that the first substantial features are found. Across the northern, central and southern portions of the site, pits, postholes and hearths were found associated with Neolithic and Early Bronze Age material (Johnson & Waddington 2008: 135). Johnson & Waddington (2008: 135) were only able to discern one possible structure from an arrangement of pits, postholes and two hearths that appears to be a large structure

with an area of 18.5 m x 4 m with at least two temporal phases (Figure 6.10a). To the west of this were many pits of varying size, although most were empty. Of note was a significant pit (F031) that was found just 3.5 m from this possible structure and it had two fills: the upper and lower fills were distinct in colour, but sherds of Carinated Bowl pottery and 1000+ fragments of hazelnut shell were indiscriminately put in both fills. Associated radiocarbon

dates were determined at 3940-3700 cal BC and 3770-3630 cal BC from the lower fill (Johnson & Waddington 2008: 164).

An alignment from pit F031 included F033, F027 and F009, which led 26 m away from the possible structure. The first three pits were empty, but the last, F009, had contents very similar to F031 (Johnson & Waddington 2008: 144). It also had two distinct fills including burnt material and enormous quantities of hazelnut shell. Eight emmer wheat grains, chaff, other cereal grains, 22 broken lithics, a carved stone ball roughout, a sandstone whetstone, a quartzite hammerstone and a granite roughout were in this pit (Johnson &



Bronze Age

The excavation of some of the pits by MAP in 2003 produced a pit with Beaker sherds. A radiocarbon date was obtained from a residue on this vessel, placing it in the 2140-1880 cal BC timeframe (Johnson & Waddington 2008: 165).

Two round, post-built structures with porches were found at Cheviot Quarry that had associated hearths and pits (Johnson & Waddington 2008: 146). A rectangular structure sat in between these two. Within the structures, flat-rimmed ware pottery was found, as well as barley grains, emmer wheat grains, chaff, fire-cracked rock and at least one piece of burnt daub (Johnson & Waddington 2008: 149). Radiocarbon dates place houses 4 and 5 in the Late Bronze Age timeframe, which supports the presence of the flat-rimmed ware pottery: 1000-820 cal BC, 1020-800 cal BC and 1050-830 cal BC (Johnson & Waddington 2008: 165).

Iron Age

In addition to this, radiocarbon dates from the Iron Age were determined from material found in postholes associated with the Anglo-Saxon house (Johnson & Waddington 2008: 153). These dated to 410-260 cal BC and 400-230 cal BC.

Dark Age

Three rectangular structures were also found with material and associated radiocarbon dates that place them in the Anglo-Saxon period (Johnson & Waddington 2008: 155-8).

12. Lanton Quarry, (Milfield), Northumberland

The preliminary report for Lanton Quarry is not as detailed as the site report will be once it is published, but the discoveries made at this site during full-scale excavation of 13 hectares ahead of quarrying gives evidence for occupation of the site from the Mesolithic to the present period.

Neolithic

On the northern and southern portions of the site at the gravel terrace edges, evidence for Neolithic habitation was found (Waddington 2008: 23). Pits in four trapezoidal and three

triangular arrangements with associated hearths represent structures. Midden pits were associated with these structures and contained sherds of Carinated Bowl, Impressed Ware and Beaker, cobble tools, a quern rubber, flint blades and a saddle quern. One radiocarbon date was determined at $2640\pm40\text{BC}$.

Late Bronze Age

Waddington (2008: 23) also reports three unenclosed Bronze Age round houses, including one that had a porch feature at its entrance. Rectangular structures were associated with each house and were thought to be outbuildings to the domestic structures. Waddington (2008: 24) draws a comparison to similar structures found nearby at Cheviot Quarry that dated to the Late Bronze Age. Flat-rimmed ware and associated radiocarbon dates of $1220\pm50\text{ BC}$ and $1130\pm40\text{ BC}$ suggest that these houses were contemporary with Cheviot Quarry.

Waddington (2008: 26-29) also records the findings of an Iron Age burial that dates to the first century BC and substantial structures from the Anglo-Saxon period, which again link Lanton Quarry to the nearby sites of Cheviot Quarry, Thirlings, Yeavinger and Milfield.

13. Thirlings, (Milfield), Northumberland

The Thirlings site is located in the southern part of the Milfield Plain on a delta terrace at 46 m O.D. (Miket 1987: 37). It was first noticed by Prof. N. McCord in 1978-81 during his aerial surveys as field systems associated with its later Anglo-Saxon occupation, but upon closer inspection during excavation in 1976 by Miket, it was found to have significant prehistoric material as well (Miket 1976: 114; 1987: 37; Miket et al. 2008). Thirlings was a settlement during both parts of the Neolithic and yielded not only copious amounts of Grooved Ware, hazelnut shells and cereal grains, but it also had the first known Neolithic structure in the area (Figure 6.11a).

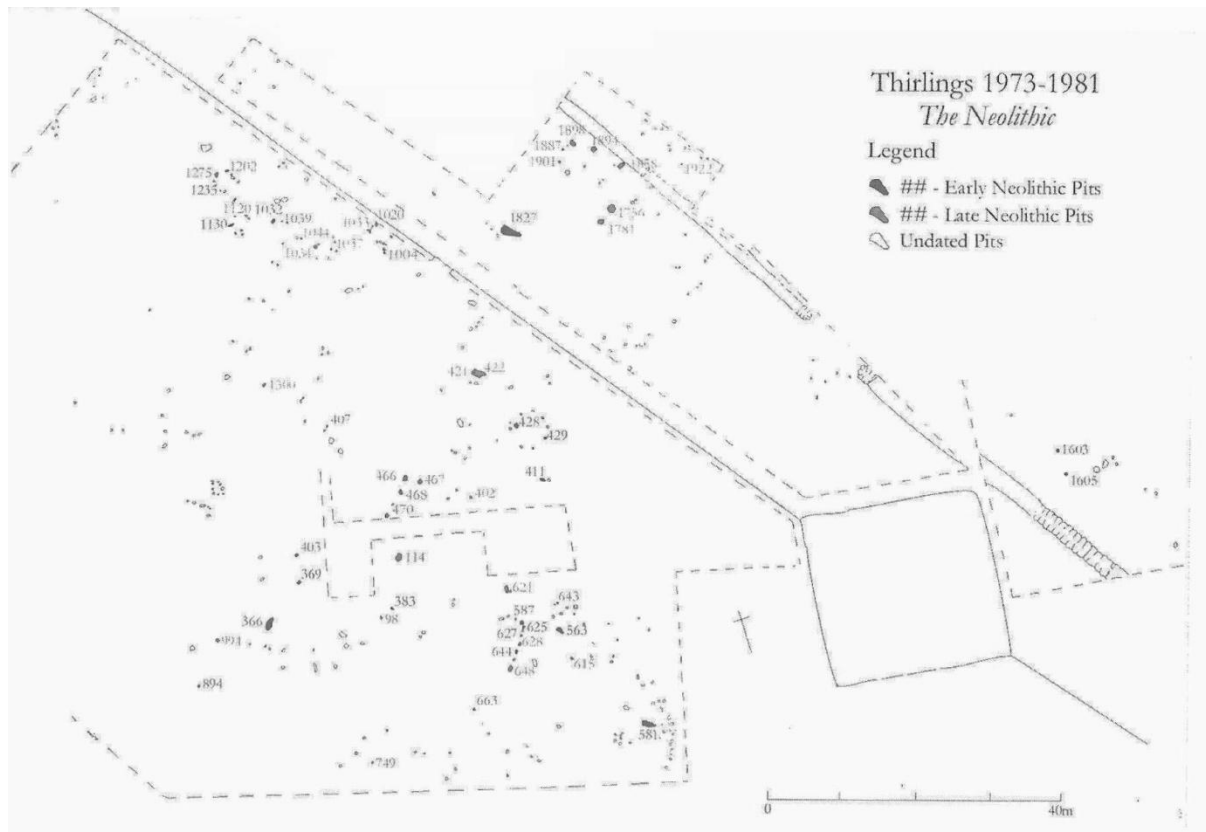


Figure 6.11a: Thirlings site plan (from Miket et al. 2008, 6)

Neolithic

Thirlings is located on good-draining soil and, although the closest water source is a kilometer away, before the draining of the valley in the 19th century it is known that this area was marshy, so the site would have been in close proximity of water, game, thatch, and reeds for baskets, mats and clothing (Miket 1987: 44). The only observable structure from the Early Neolithic component was a trapezoidal layout of post-pits running east-west and measuring 6.4 m long and 3-5 m wide (Miket 1987: 37). In one posthole were Carinated Bowl sherds. Just 5.6 m south of this structure was a shallow pit containing over 400 sherds of Carinated bowl representing a minimum of 12 vessels (Miket 1987: 39-40).

Pits containing material from the Middle and Late Neolithic were also found at Thirlings. Seven pits aligned in a right angle are believed to be the remains of a tent-like structure measuring 8 m x 4.3 m (Miket 1987: 57; Waddington 1999a: 157; Miket et al. 2008). The pits contained charcoal, the remains of the posts and, in one pit, 25 sherds of Impressed Ware representing two pots. A second pit, 4 m southeast of this, contained similar pottery and had a sandstone quern was placed upright to secure the post the pit held (Miket 1976: 119).

Beside this group of features was another concentration (called group 1) of thirty-five features containing hazelnut shells, bone and pottery (Figure 6.12a). Five pits were also found

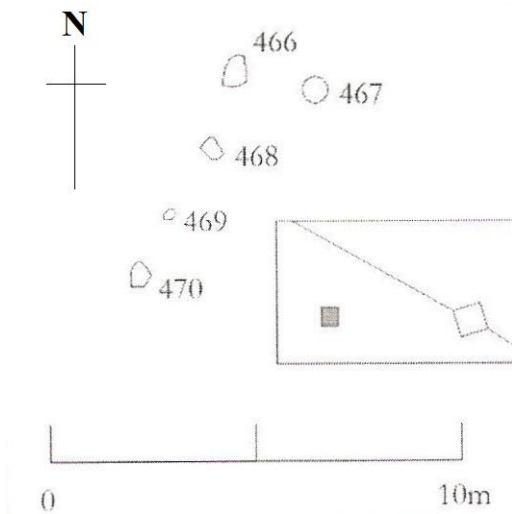


Figure 6.12a: Thirlings, plan of group 1 LN pits (from Miket et al. 2008, 20)

in a line; one of particular interest was Feature 466 which had been lined with clay and Impressed Ware sherds of the Fengate style (Miket 1976: 119; Miket et al. 2008). After this, the pit was filled with domestic waste and burnt material including carbonized hazelnut shells and pottery sherds, and finally, a post with thirteen stakes surrounding it (Miket 1976: 119; Miket 1987: 59). The pits also contained several cereal grains including oats and 6-row barley, and soil samples were found to contain vetches, brome grass, fat hen and chickweed. These are all associated with arable fields showing that

cultivation was taking place (Miket 1987: 59). Moreover, archaeobotanic samples showed that hawthorn, bramble, and hazelnut were prevalent near the site suggesting a woodland nearby, and sedge and blinks indicated a marsh.

Early Medieval

Thirlings was also the site of an extensive Anglo-Saxon settlement that was related to the palatial site of *Gefrin* (Yeavering), located just to the west within the plain. Anglo-Saxon settlement seems to have been intense in the Milfield Basin and important sites are also known at Cheviot Quarry, Lanton Quarry and Milfield. When *Gefrin* was destroyed by fire, the palace was moved north to what is now the village of Milfield and was called *Maelmin*.

14. Wether Hill, Northumberland

At the top of Wether Hill, in the Ingram Valley, a sherd of Impressed Ware pottery was found by Peter Topping in Iron Age ploughsoil (Topping 1997: 114). Although obviously residual, it was found alongside contemporary-style flints. A burial cairn was also noted to be nearby, which led Topping to believe that the sherd may have come from burial contexts from an

earlier cemetery; however, he does stress it may simply be evidence for domestic activity in the area (Topping 1997: 114).

15. Bewick, Old Bewick Moor, Northumberland

Kinnes & Longworth (1985: 134) records a round cairn that was opened by Shepherd in April 1865 as UN12. The cairn was said to contain two burials, one with a 'drinking cup'. A Food Vessel rim was also recorded from the site and described here. However, characteristics of this rim, particularly its bevelled rim top that slopes in and down, its flattened rim edge and T-shaped profile, as well as the grooved herringbone and lattice decoration, is more like Impressed Ware than Food Vessels. It is for this reason that it is catalogued here as such.

Late Neolithic – Grooved Ware (Map 6.2).

1. Hedderwick, (Dunbar), East Lothian

See section: Late Neolithic – Impressed Ware, #1.

2. Overhailes, (East Linton), East Lothian

See section: Late Neolithic – Impressed Ware, #2.

3. Eweford, (East Linton), East Lothian

*Eweford East
(Figure 6.13a)*

Two parallel pit alignments were found that enclosed a possible structure and scattered

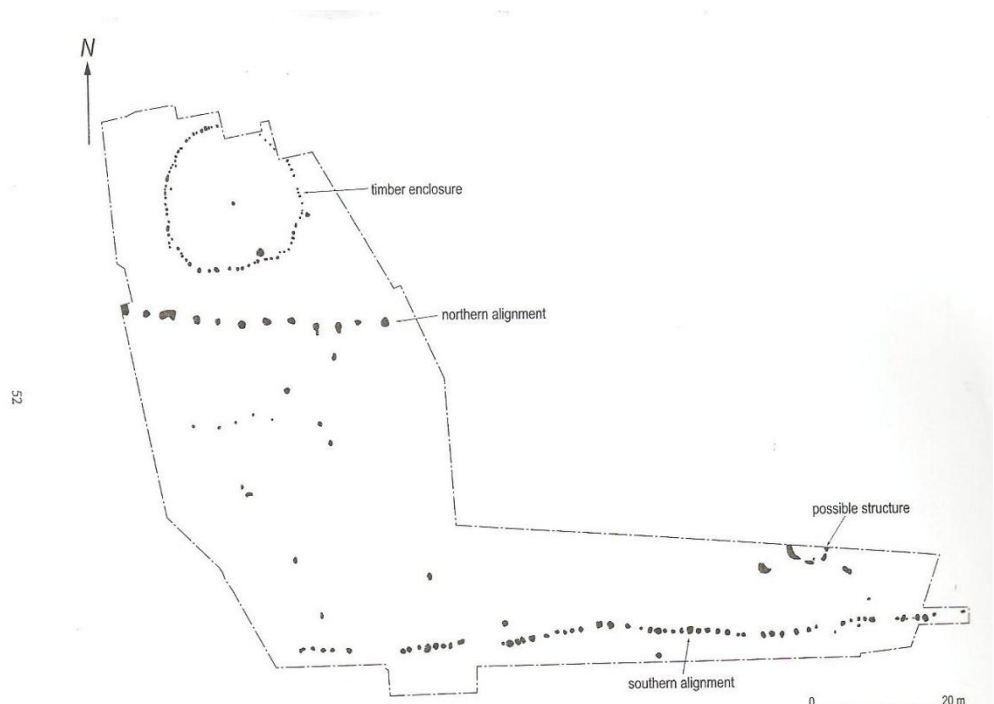


Figure 6.13a: Eweford East, site plan (from Shearer & McLellan 2009, 52)

features (Shearer & McLellan 2009: 53). Just outside this, to the north, was a timber-built enclosure. The southern pit alignment consisted of 62 pits, each about 1.05 m in diameter and 1.04 m deep. All had similar fills that had flint, chert, stone objects and tools, cupmarked stones and many still held post-pipes. Shearer & McLellan (2009: 58) suggest that wicker hurdling might have been set between the posts to create a fence or boundary. Radiocarbon dates ranged from 2880-2580 cal BC to 2470-2230 cal BC, demonstrating a period of about 600 years during which the alignment was extended in sections and parts were replaced (Shearer & McLellan 2009: 53). Shearer & McLellan (2009: 58) believe that greater amounts of charcoal in some sections of the alignment indicate that parts of it burnt down at various times.

The northern pit alignment was built around the same time the final part of the southern one was constructed, c. 2400 cal BC (Shearer & McLellan 2009: 61). Thirteen oval pits were excavated over a space of 38 m, but aerial photographs show that the alignment is about 100 m longer than this, with the excavated area representing the centre portion. Each pit contained similar fills of stone packing, post-pipes and finds of flint tools, Grooved Ware sherds and charcoal (Shearer & McLellan 2009: 61-4). Radiocarbon dates from the charcoal range from 2490-2200 cal BC.

Between these two pit alignments, several features were also found, including linear features forming a circular shape (Shearer & McLellan 2009: 52). In addition, to the north of both alignments, an enclosed space, 20 m in diameter, was made by 70 closely-spaced pits containing posts (Shearer & McLellan 2009: 59). Four features were also excavated inside the enclosure and one of these, post hole 1478, contained charcoal that radiocarbon dated to 2620-2460 cal BC and 2570-2300 cal BC (Shearer & McLellan 2009: 61). Only one sherd of Grooved Ware was found in one of these post holes (1577).

Eweford West

Eweford West, located 250 m from Eweford East, was the site of Early Neolithic mortuary activity (McGregor & Stuart 2009: 83). Over the centuries of the Early Neolithic, several timber and stone structures had been built and burnt down at the site and many smashed Carinated Bowl vessels suggests feasting or ritual behaviour associated with these features. Both disarticulated and cremated remains were in these layers. Finally, the site was covered

in rubble and earth to form a long, trapezoidal cairn with a drystone wall revetment, a timber façade and a hollowed area on either side of the mound (Figure 6.14a).

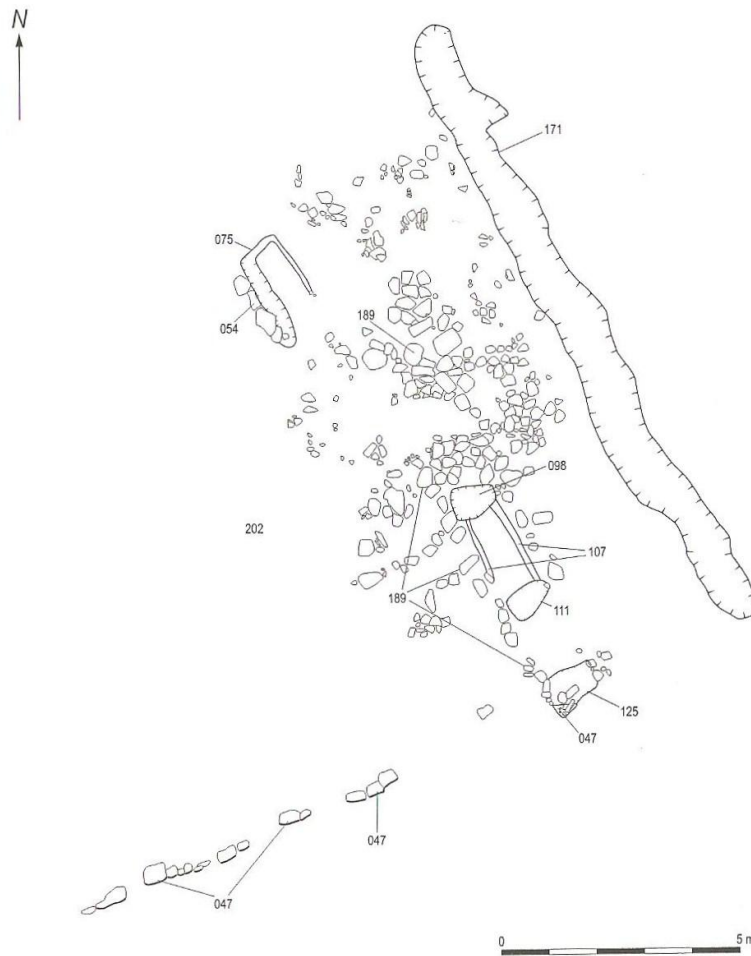


Figure 6.14a: Eweford West, plan of long mound (from MacGregor & McLellan 2009, 22)

Later Neolithic

The only Middle/Late Neolithic trace is a pit (101) that had a fill which contained flints, two sherds of Grooved Ware from separate vessels, grains of six-row barley, hazelnut shell (radiocarbon dated to 3020-2700 cal BC) and charcoal (Shearer & McLellan 2009: 84).

The hollows on either side of the cairn were also filled at this time with deposits of flint tools, polished stone axes, Grooved Ware sherds. Cremated human remains were found as well, although the date of these is uncertain (Shearer & McLellan 2009: 84). Pit 104 contained enough cremated material to determine that it was the grave of an adult and a neonate.

Eventually the deposits were all covered with stone rubble, creating arcs on the sides of the

mound that were 6-7 m long and 1.2-1.4 m wide (Figure 6.15a) (Shearer & McLellan 2009: 88).

Later Neolithic – Beaker

Within 200 m of the mound, three pits were excavated that contained Beaker sherds (Figure 6.16a). The furthest, 028, held sherds from 4 vessels of different Beaker forms, burnt

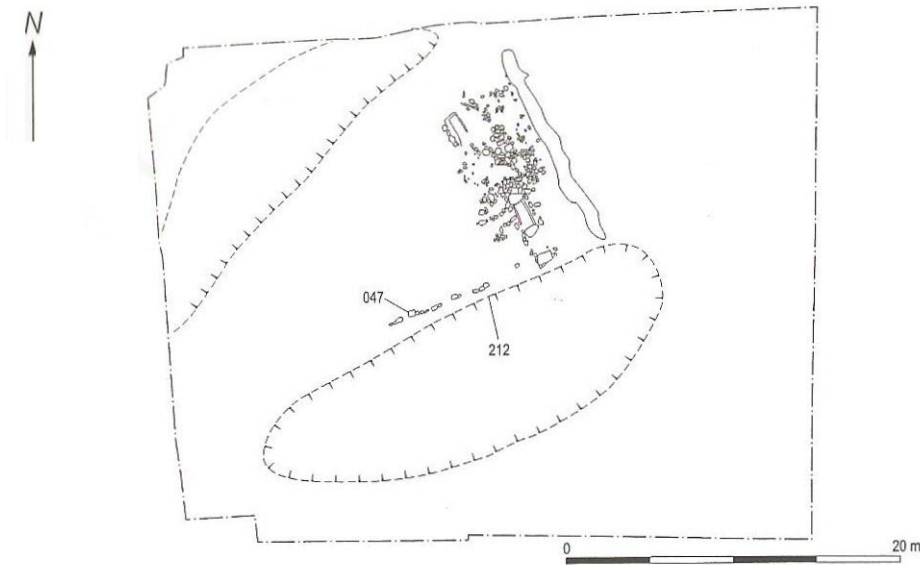


Figure 6.15a: Eweford West, plan of Late Neolithic hollows (from MacGregor & McLellan 2009, 30)

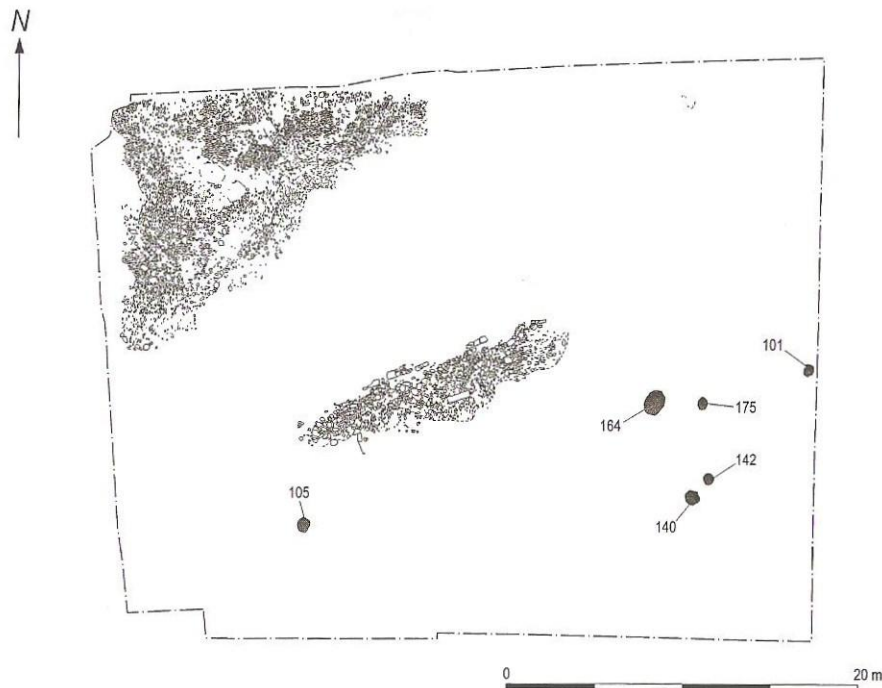


Figure 6.16a: Eweford West, plan of Beaker features (from MacGregor & Stuart 2009, 82)

hazelnuts, cereal grains and charcoal. A radiocarbon date of 2310-2030 cal BC was obtained (Shearer & McLellan 2009: 89). The second pit, 142, contained charcoal, carbonized hazelnut shell and 2000 cereal grains (barley, bread wheat and emmer wheat). This dated to 2280-2030 cal BC (Shearer & McLellan 2009: 89). Fragments of chert and flint were also found. The final pit, 140, contained ash, charcoal, chert and flint flakes, carbonized hazelnut shell and 1000 grains of cereal and three large stones that acted to seal the contents at the top of the pit. A date of 2200-1940 cal BC was obtained from one of the cereal grains (Shearer & McLellan 2009: 89).

Later Beaker pits were also found dug into the mound. A sub-rectangular pit, 164, was excavated into the side of the long mound and contained a fill of 25, 000 burnt cereal grains (barley and emmer wheat), charcoal, a worked point and sherds from two Beakers (Shearer & McLellan 2009: 89-90). A radiocarbon date was determined at 2140-1910 cal BC. Pit 175, which was dug into the mound as well, held 9000 grains of burnt cereals and the sherds of four Beakers. And a third pit was a cremation grave with sherds from a Beaker.

In the Beaker period, the mound was also site to several cremation pyres and scattered cremated remains were found spread across this layer of the monument (McGregor 2009: 106). In addition, an inhumation burial of a male in his thirties was found near the mound at the Eweford Cottages in 1973. A sample of the bone was radiocarbon dated to 2140-1890 cal BC (Shearer & McLellan 2009: 91).

Early/Middle Bronze Age

Many pits containing urned and un-urned cremation burials were found in the hollows beside the long mound and radiocarbon dates place this phase in a range from 1890-1520 cal BC (McGregor 2009: 106). These are summarized as follows:

Cremation deposit	Remains	Associated Artefacts	Radiocarbon Date	Comments
064	Adult male, adult female, infant	Bone toggle		

Appendix 1: The Sites of the Study Area

043	Three adults	Stone battle-axe		043 is lower fill below 041; a pyre built on top of both seals them
041	Adult	Sheep/goat bone		
026	Adult female, infant		1880-1620 cal BC	
039	2 adults (1 male), adolescent, infant	Collared Urn upright containing cremations; barrel-shaped bead	1750-1520 cal BC	
136		Bipartite Urn, upright and empty		
034	2 adults under 20 years (male, female), adolescent, infant	Cordoned Urn inverted over cremations	1880-1630 cal BC	One of the adults had a compression fracture in the lumbar vertebra from trauma to the lower back
031	Adult female	Collared Urn, upright?	1880-1680 cal BC	
122	Adult female		1890-1680 cal BC	
117	Adult under 20 years, adolescent		1890-1690 cal BC	
144	2 adults (1 male)	Bronze tanged knife-dagger	1860-1530 cal BC	Trauma to the lower arm and chest of one of the adults
119	Female aged 40+		1740-1520 cal BC	Healed compression fracture to spine

4. Lamb's Nursery, Dalkeith, Midlothian

In anticipation of a development in 1992, an evaluation at Lamb's Nursery in Dalkeith, produced a timber roundhouse (Cook 2000: 93). This led to a full excavation in 1998, during which the roundhouse was further explored and pits containing Grooved Ware pottery were found adjacent to it. The site is located on the south Esk river valley above the natural floodplain at 55 m OD and three phases of occupation were determined from investigation: Neolithic, Early Bronze Age and Middle Bronze Age (Figure 6.17a)(Cook 2000: 95).

Neolithic

Structure A consisted of post- and stake-holes in an arc. Within these, three sherds from different pots were uncovered and oak-charcoal from the pots was AMS dated to 4130 ± 50 BP (Cook 2000: 96). Two further postholes to the north and south of the arc were excavated, producing a post-pipe and a Grooved Ware sherd in the southern one, and four sherds from

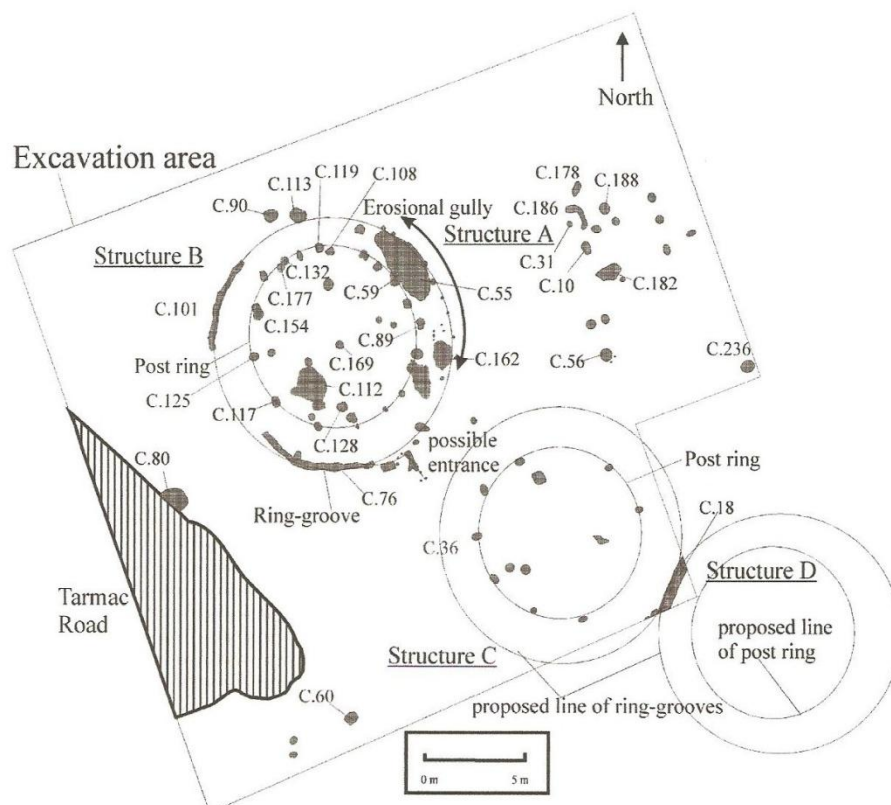


Figure 6.17a: Lamb's Nursery, site plan (from Cook 2000, 96)

separate pots in the northern one. Further post and stake holes without obvious alignment dotted the area around these.

The second cluster was to the north with two prominent pits filled with charcoal (Cook 2000: 98). Both of these contained matching upper and lower fills where the former contained only loose, brown, sandy soil with charcoal and the latter with a stonier, more charcoal-rich matrix. In one of these, two pot sherds were found along with charred hazelnut shells that AMS dated to 4070 ± 110 BP.

A third group of features at the southwest of the site consisted of two postholes and a pit that was filled with charcoal and 'blackened stone' (Cook 2000: 98). A bulk sample from this pit dated to 4510 ± 80 BP.

Early Bronze Age

The Early Bronze Age phase of Lamb's Nursery is represented only by one pit found within the ring-groove of the Middle Bronze Age house (Cook 2000: 98). It consisted of a hollow, measuring 8 x 1.3 m, with a fill of 0.45 m deep. At first, it was thought to be a hearth from the later house, but thin section analysis determined that it was not the remains of one. A piece of hazelnut charcoal from the fill produced a date of 1845 ± 50 BC.

Middle Bronze Age

Structure B was located just to the west of Structure A (Cook 2000: 98). It consisted of a ring-groove, 12 m in diameter, an internal circle of 19 posts (presumably to hold up the roof), a gully, and other internal features (pits, stake-holes, etc...). Hazel charcoal, found in the ring-groove, produced an AMS date of 1140 ± 50 BC, whilst the internal ring of posts dated to 3085 ± 50 BP (hazel charcoal) and 1260 ± 90 BC (bulk sample) (Cook 2000: 99). The gully, which extended some 8 m and spread 1.5 m wide, contained a piece of pottery and three pieces of worked flint. Hazel charcoal from this feature dated to 1145 ± 50 BC, but Cook (2000: 99) cautions that this may simply be an eroded portion of the ring-groove and a post-hole.

A circular arrangement of eight postholes to the southeast of the site, Structure C, measured 7 m in diameter and yielded a single sherd of handmade pottery (Cook 2000: 100). Structure D lay just south of this alignment and consisted of a ring-groove and stakeholes.

Throughout the site, barley and wheat grains were found, which is common for the region at this time (Cook 2000: 106); however, Structures B and C also contained the remains of oats. Since, oats are usually associated with the Late Bronze Age or Iron Age, this is one of the earliest recorded examples of the crop in Britain (Cook 2000: 107).

5. Milfield North pit, Northumberland

Near to the Milfield North henge and pit alignment, an evaluation trench was excavated to uncover part of a linear ditch and two pits (Figures 6.18a and 6.19a) (Passmore & Waddington 2009: 196-7). The ditch was found to be 3-4 m wide with a broad, shallow, U-shaped profile, and the two pits lay beside this. Pit 1 measured 0.69 x 0.82 m in diameter and 0.33 m deep, although it was probably deeper in antiquity (Passmore & Waddington 2009: 199). It contained two fills, a darker upper fill rich in burnt material, and a looser, sandier lower fill (Passmore & Waddington 2009: 199). Three sherds of Grooved Ware and seven flints were discovered in the upper fill, whilst a further 31 sherds and six flints were in the lower one. Passmore & Waddington (2009: 199) note that the sherds were pressed into the sides of the pit, not unlike the Impressed Ware and clay-lined pits found at Thirlings and Meldon Bridge. Two radiocarbon dates from charred wood in the pit fill were determined at 2620-2450 cal BC and 2570-2340 cal BC.

Pit 2 was only 1 m from Pit 1 and measured 0.48 x 0.64 m in diameter and 0.31 m deep – it probably had been the same depth as Pit 1 originally (Passmore & Waddington 2009: 199). It contained one fill of soil and stones and was particularly steep on one side, leading Passmore & Waddington (2009: 200) to suggest it may have originally held a post, although no postpipe was found.



Figure 6.18a: Milfield North pit - site location (from Passmore & Waddington 2009, 197)

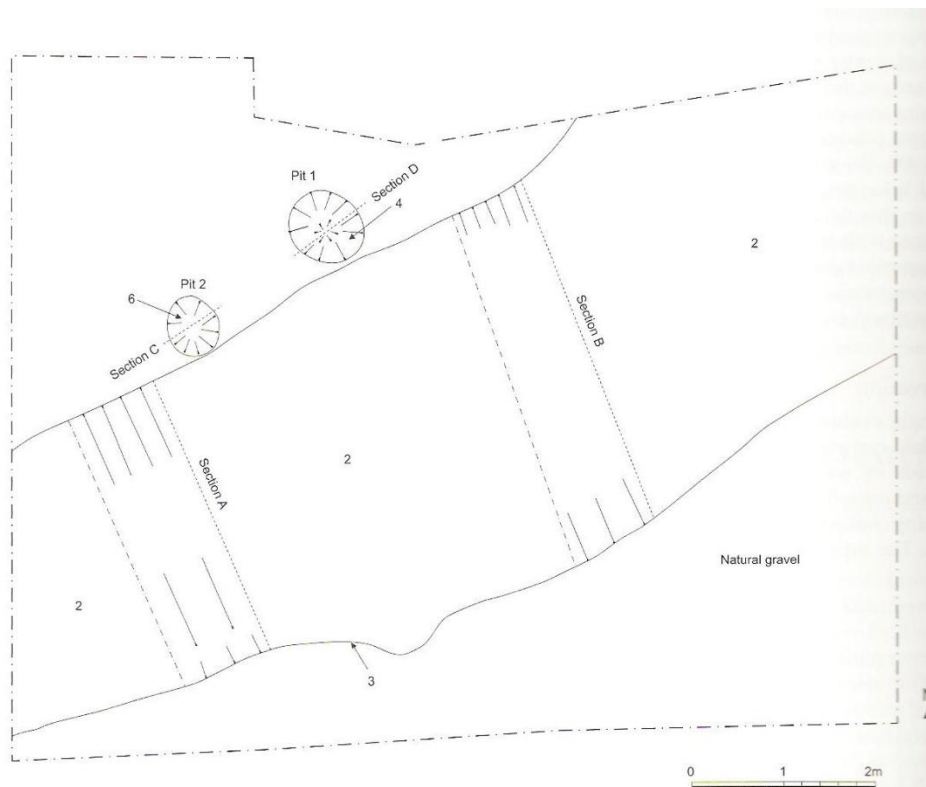


Figure 6.19a: Milfield North pit - site plan (from Passmore & Waddington 2009, 198)

The purpose of the Milfield North pit is not certain; however, the Grooved Ware and radiocarbon dates obtained from it place it in a much earlier context than the adjacent Milfield North henge.

6. Ewart I Pit Alignment, Northumberland

In the Milfield Basin, Northumberland, there are six pit alignments recorded. These include: Ewart 1, 2, 3, Milfield Palace site, Milfield Plantation and Milfield North (Miket 1981: 137). In 1977, one of these, Ewart 1, was selected for excavation to explore the nature and possible

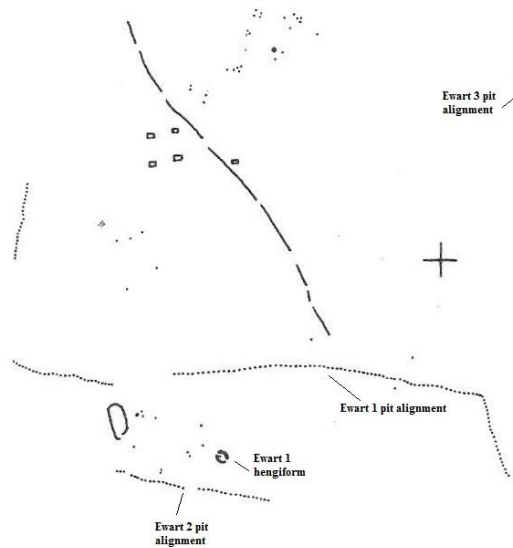


Figure 6.20a: Ewart I site plan (after Miket 1981, 138)

age of these landmarks (Figure 6.20a). An area of 6.3 m x 17.5 m was excavated over the alignment, which encompassed six pits and two half-sections of pits on either end of the trench (Miket 1981: 138). The pits were set at intervals of up to 0.8 m, and from their fill of packed earth and packing stones, are thought to have held upright posts (Miket 1981: 143-5).

Pits 2 and 3, both measuring 1.9 m x 2.68 m and 0.7 - 0.8 m deep,

were shelved on three sides (Miket 1981: 139). Pit 3 contained Grooved Ware sherds, flint and bone. Pit 4 was larger at 4.12 m x 2.10 m and 0.66 m deep and was also shelved on the same side as 3. It was cut by Pit 5 and this 'double pit' was found to have six layers in its centre that contained Grooved Ware pottery and flint. Pits 6/7 formed a second double-pit where Pit 6 was the larger at 6.3 m x 2.10 m and 0.77 m deep, whilst Pit 7 was 6.3 m x 2.8 m and 0.83 m deep. Pit six had two intrusions, 10a and 10b (10a being the second intrusion chronologically), where a single residual Grooved Ware sherd was found. Grooved Ware sherds were found in both pits 6 and 7. Miket (1981: 145) concludes that this alignment most likely formed a barrier holding posts to section off the Ewart henge. This is reinforced by the fact that Ewart 2 pit alignment forms a southern barrier around the henge and then bends at a 90° angle to enclose it on a third side.

7. Cheviot Quarry, (Milfield), Northumberland

See section: Late Neolithic – Impressed Ware, #11.

8. Lanton Quarry, (Milfield), Northumberland

See section: Late Neolithic – Impressed Ware, #13.

9. Thirlings (Milfield), Northumberland

See section: Late Neolithic – Impressed Ware, #14.

10. Old Yeaving, (Milfield), Northumberland

At the base of the Cheviot Hills in the southwest end of the Milfield plain is the site of Old Yeaving (Hope-Taylor 1977: 4-5). Located on a slight hill of glacial sand and gravel between the River Glen and Yeaving Bell, this was once the royal site of Gefrin in the Anglo-Saxon kingdom of Bernicia (Hope-Taylor 1977: 6). In records from 1329, Ekwall explains that the name *Yeaving* is an evolved version of the Anglo-Saxon name *Gefrin*, which came from the words *gafr* (goat) and *bryn* (hill) (Hope-Taylor 1977: 15). No doubt the name originally referred to Yeaving Bell, which was probably later named on account of its ‘bell’ shape. After the identification of the palace features through aerial survey, Dr. Brian Hope-Taylor explored the area from 1952-1962 to salvage the site from quarrying (Ferrell 1990: 29; Harding 1981: 119). Although his work was meant for better understanding of the Anglo-Saxon period (especially to solve questions surrounding the move of the royal palace to the interior of Bernicia from the coast), Hope-Taylor also found the remains of two ring-ditches, a ‘ritual’ pit, a henge and a standing stone (Ferrell 1990: 29).

Neolithic

To the north of the site near the Anglo-Saxon building C, a large pit was found which had miniscule amounts of cremated bone, much charcoal and a large quantity of Grooved Ware very much like that found at Thirlings (McInnes 1977: 348). Three distinct layers were found in this pit. In layer A, closest to the surface, large pieces of pottery, burnt bone and tiny bits of charcoal were dug up. Under this, in layer B, was simply soil with a few pieces of charcoal. Layer C, however, contained burnt bones, a “dense concentration of charcoal”,

hazelnut shells, pottery, and one flint flake (Hope-Taylor 1977: 348). Hope-Taylor (1977: 348) believes that this was a ritual pit and that all of the fills were contemporary since sherds from layers A and C were found to fit together

Bronze Age and Iron Age

The two ring ditches at this site were both found at the base of Yeavinger Bell on the west and east sides of the Anglo-Saxon site. The western ring-ditch consists of a circular segmented ditch 15.8 m in diameter (Ferrell 1990: 29). The ditch segments are 18 cm deep on average, but were found to be up to 45.5 cm deep; however, the shape of the ditches has caused Ferrell (1990: 29) to question if they might have actually held squat upright stones when the monument was in use. In the centre of the ring-ditch, Hope-Taylor uncovered a pit measuring 2.29 m in diameter and 61 cm deep which held a cremation with a post on top. This was found in association with three other postholes forming a rectangle (Ferrell 1990: 29). Hope-Taylor (1977: 30) suggests that the western ring-ditch had undergone several modifications: the segmented ditch and central hole were first dug, then a cremation was put in the central pit. Next, an upright was placed in the pit when the outer stone circle was constructed, and finally, the stones were removed and posts were put in their place. Sometime during the later phases, this monument was used as a cemetery for thirty-one inhumations (some of which cut into the postholes); however, even at this stage the inner circle seems to have held significance as all but four of these had been placed within the post setting (Ferrell 1990: 30). Since soils in the Milfield Basin tend to lend themselves to poor preservation, nothing but a little tooth enamel remained in these graves, but one yielded an iron knife suggesting a late prehistoric date for the cemetery.

The eastern ring-ditch was found partially within the Great Enclosure of Gefrin, but was obviously older as it had actually been cut into by it (Ferrell 1990: 30). It measured 13.4 m in diameter and near the centre of the circle was a pit with cremated bone and the remains of an urn.

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Late Neolithic/Early Bronze Age – Beaker (Map 6.3)

1. West Links, North Berwick, East Lothian

In 1899, whilst digging a drainage ditch, a small cist was found that contained the flexed inhumation of a child (Richardson 1899: 122). A Beaker lay on its side nearby. Richardson (1899: 123) notes that part of the Beaker seems to have, “...been dissolved away, possibly by its contents, which seemed, from a deposit to have been of a fatty nature.”

2. Archerfield, Gullane, East Lothian

See section Late Neolithic – Tyne-Forth Regional Ware ceramics, #1

3. Hedderwick, Gullane, East Lothian

See section Late Neolithic – Impressed Ware, #1.

4. Drem, West Fenton, East Lothian

Found during ploughing in 1942, a cist located on a slightly raised bit of ground contained a Beaker and the inhumation of a child, 10-12 years old (Childe et al. 1943-4: 114). It is a particularly well-constructed specimen and displays images of six-row barley.

5. Drem, Haddington, East Lothian

The capstone of a cist was hit while ploughing a field near the farm of Drem in 1882 (Smith 1882: 299). Inside lay the flexed inhumation of an adult and a Beaker sat at their feet.

6. Kirkhill Braes, Dunbar, East Lothian

Whilst excavating to build, 12 graves were found, one of which was well-preserved. It contained an extended burial and so the 12 were determined to be Christian burials (Calder &

Feachem 1950-1: 179). It is stated that, “fragments of a beaker were also found at the same place”, but their context is not mentioned in relation to the burials.

7. West Pinkerton, Broxburn, East Lothian

A Beaker burial was found at this site on a slight knoll during ploughing (Stevenson 1939: 231). In a large, well-made cist, the remains of two males were found, and a Beaker, containing a dark brown residue near its bottom, stood in the corner behind their shoulders (Stevenson 1939: 232). It seems that since the cist is larger than usual for the time, it must have been built for both males; however, the disarticulated remains of the first male contrast with the articulated remains of the second, suggesting that they did not die at the same time and the grave was re-opened some time later to accommodate the second male.

8. Broxmouth Waird, Oxwell Mains, Dunbar, East Lothian

A note on the Canmore website (retrieved 24/02/12) lists this Beaker, but no context is known.

9. Eweford, East Lothian

See section: Late Neolithic – Grooved Ware, #3.

10. East Barns, East Lothian

In a note of acquisition, the National Museum of Scotland lists a Beaker, found in an inhumation burial whilst ploughing in February 1900 (Meeting Minutes 1901).

11. Windy Mains, East Lothian

A cist was found at Windy Mains in 1857 whilst digging in a sandpit (Forman 1857: 51). It contained the skeletal remains of a male and a Beaker. Forman (1857: 52) notes that the previous day another cist had been found in the same area that was less well-preserved and held only a few bones and a second Beaker. Moreover, it is recorded that these burials were located only 800 m from a stone circle at Doddridge Law, which is now destroyed.

12. Longniddry, Boglehill Wood, Gladsmuir, East Lothian

Whilst clearing land of trees to build a golf course in 1915, a cist was discovered on a ridge that overlooks the land only 200 yards inland of the Forth (Callander 1915-6: 150). The cist was emptied and the remains of a Beaker sent to the museum, where J. G. Callander examined them and wrote this report.

Also, during the excavation, in 1925-7, of a low mound on the golf course, a Beaker and five urns were found. These were donated to the museum in 1945 along with: a flint knife and flake, two annular beads of blue vitreous paste, two pieces of shale, shells and cremated bone, which are recorded as having been found in the mound. No reference to a site report or the associations of these artefacts is given.

13. Ruchlaw Mains, East Lothian

A cist was found in 1979 during the ploughing of a slope in a field with rolling hills. This field had not been ploughed until 1934 and was largely used to grow fruit, which may explain why the cist was not found before this (Ashmore 1982: 543). Inside the cist was a flexed inhumation of a 40-45 year old male with a broken Beaker lying on its side (Ashmore 1982: 544-5). A radiocarbon date of 3720 ± 80 bp was obtained (Ashmore 1982: 547).

14. Nunraw, Garvald, East Lothian

In 1944, a cist was found on an elevated terrace, 183 m OD, whilst ploughing (Childe 1943-4: 116). Excavated by V. G. Childe, it was found to contain the sparse remains of a 6-7 year old child. A Beaker was set behind the head of the child and a small flint flake was found under the body within the pebble floor (Childe 1943-4: 117). A thin brown layer was noticed on the head of the child, which was later analysed and found to be thin strands of grass (Laing 1943-4: 119). This may have been matting of some sort, or a covering for the body.

15. Thornton, Innerwick, East Lothian

On a ridge in a farm field near Thornton, a cist was found whilst ploughing that contained an inhumation with a skeleton (Childe 1938-9: 318). The Beaker and the human remains were removed by the local police before V. G. Childe arrived to excavate, but they record that the Beaker was on its side in sherds as if it had fallen over naturally after the burial (Childe 1938-9: 319).

16. Thurston Mains, East Lothian

Near Innerwick, a cist was found during ploughing in 1939 that still contained its burial and grave goods in good preservation (Stevenson & Low 1939-40: 138). Two flexed inhumations lay in the trapezoidal cist with a Beaker behind the lower back of one, and a flint knife in the centre. Both skeletons were from females under 35 years of age and it was concluded they had been buried together at the same time (Stevenson & Low 1939-40: 139-40).

17. Skateraw, Innerwick, East Lothian

On a slight ridge, a cist was found in 1939 in a farm field at Skateraw. Within, only a ceramic vessel, which is described as a, “Beaker-Food Vessel hybrid” remained (Stevenson & Low 1939-40: 141). Stevenson & Low note that there were the remains of limpet shells still attached to the stone slabs of the cist, despite the sea being over a mile away from the site. It is recorded as EE 131 in the NMS.

In 1958, a second cist was uncovered after it was hit by a plough and the flexed inhumation of a male, aged 25-35, lay inside with a Beaker (labelled P. R. Ritchie 1958 in the NMS). He had been buried some time after death as some decay of the body had taken place and the arms had been cut off and then replaced with the body, but on the wrong sides (Cruden 1958, 38).

Then in 1972, another cist was found nearby that had a flexed inhumation burial with a Beaker (EG 105) that was placed near the head. This was uncovered during roadworks on the A1 and found 2 m below the current ground level (Close-Brooks et al. 1972, 22).

18. Seton, East Lothian

A Beaker is listed in the donations made to the museum in 1882 from Seton (*PSAS 16, donations*).

19. Cakemuir Hill, Midlothian

A note, published by the Society of Antiquaries of Scotland, lists the donations made to the museum in 1854-7. This includes two ‘drinking-cups’, or Beakers, found in separate stone cists on top of Cakemuir Hill. The second ‘urn’, described as smaller and, “...ornamented in the usual way, with straight and oblique lines impressed with a twisted cord” (1854-7: 482), is a Food Vessel.

20. Craigentenny, Midlothian

A note of purchase in the 1937 volume of PSAS indicates that the National Museum of Scotland acquired a Beaker and a Cinerary Urn from Craigentenny. The cinerary urn was found with a bone pendant inside. No mention of the context of either vessel was made.

21. Juniper Green, (Edinburgh), Midlothian

A cist burial, accompanied by a Beaker and an inhumation, was found at Juniper Green, Midlothian around 1900. The skeletal remains were those of a male, over the age of 50, who is thought to have been heavy set (Coles 1898-9: 355).

22. Bathgate, (Edinburgh), Midlothian

An AOC Beaker, whose provenance is described as, “...the same sand-pit as a very similar Beaker,” is noted as a donation made to the museum in the 1920-1 proceedings. The report of the “similar Beaker” states that it was found at the sandpit whilst workmen were digging the sand (Mann 1905-6: 370). It was lying on its side on the ground 13 m below a ‘sand cliff’ that had been cut away. Mann (1905-6: 370) recorded that nothing else was observed in association with the Beaker.

23. Cairnpapple Hill, (Torphinchen), West Lothian

When Piggott excavated the site of Cairnpapple Hill in West Lothian in 1947 and 1948, it was the first modern full-scale excavation of its kind in Scotland, and certainly in the north of Great Britain (Barclay 1999). It is for this reason that much of its interpretation was based on more southerly finds. In 1999, Gordon Barclay re-evaluated the site with the advantage of 50 years greater knowledge of Scottish and Northern English prehistory at his backing, which set Cairnpapple in a more comprehensive place in its time period. Regardless of this, Cairnpapple remains one of the more extraordinary and informative sites of the region.

At the time of excavation, Cairnpapple was a much disturbed cairn on a rise of land overlooking the Firth of Forth at the 305 m contour (Piggott 1947-8: 69-73). It had started life as a henge, but was later filled in with a succession of cairns until it was one large kerbed cairn (Piggott 1947-8: 74-76). Five phases of occupation were put forth by Piggott (1947-8: 76), but in light of the trends of the region, these have been re-arranged as follows by Barclay (1999: 17): 1) Early Neolithic domestic activity; 2) construction of henge; 3) graves in the henge; 4) primary cairn + enlargement; 5) Christian burials.

Phase 1 – a series of pits, hearths and the deposition of polished stone axes and Plain Bowl sherds therein is the first activity on the site (Figure 6.28a) (Piggott 1947-8: 80). Barclay (1999: 28) notes that it is common to find Early Neolithic occupation at sites where henges were later built.

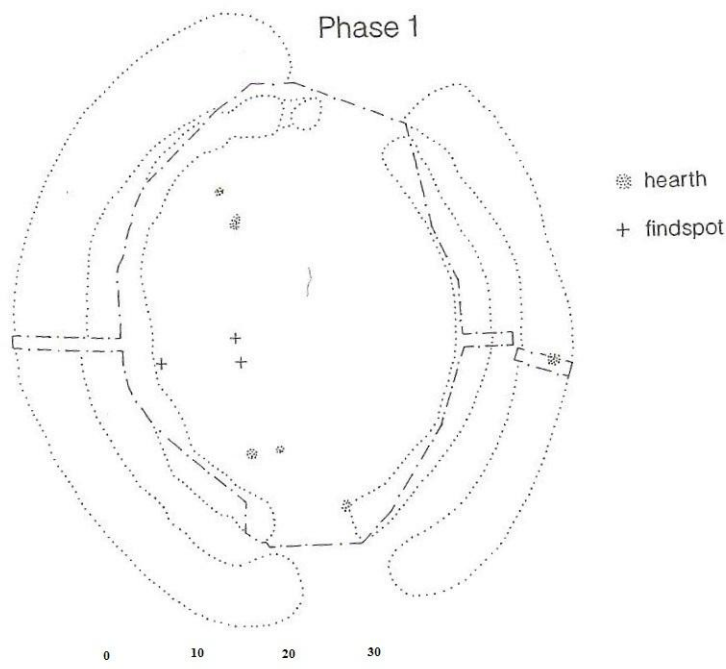


Figure 6.28a: Cairnpapple, plan of phase 1 (from Barclay 1999, 40)

Phase 2 – both Piggott and Barclay agree that the second phase of use is with the construction of the henge. This included the digging of the henge ditches, with two opposing entrances, and a circle, or ‘arc’, of uprights (most likely timbers that were later extracted) within (Figure 6.29a) (Piggott 1947-8: 77; Barclay 1999: 39). A stone setting in the centre of the monument was interpreted by Piggott (1947-8: 77-80) as a ‘cove’ in the southern English sense, but Barclay (1999: 28) suggests this may be more akin to a dolmen, like those at Stenness and Balbirnie. Pits dug around these also appear contemporary to the henge (Barclay 1999: 39).

Phase 2

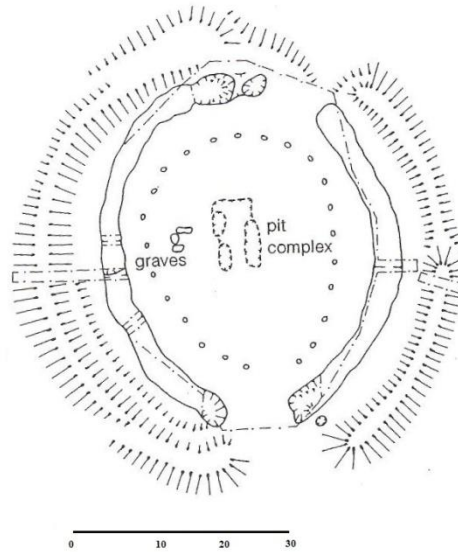


Figure 6.29a: Cairnpaple, plan of phase 2 (from Barclay 1999, 40)

0 10 20 30 m

Phase 3

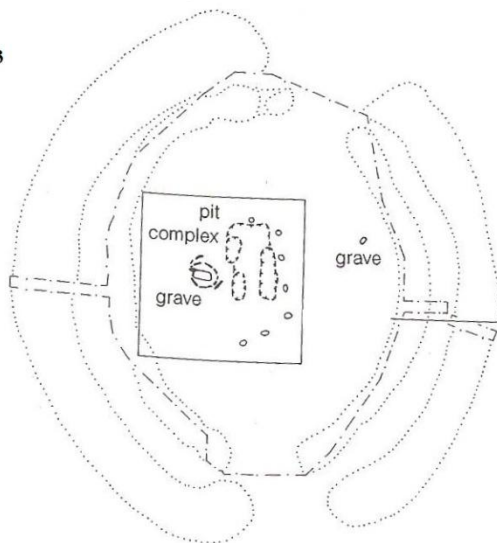


Figure 6.30a: Cairnpaple, plan of phase 3 (from Barclay 1999, 40)

Phase 3 –the ‘closing’ of the monument begins in the Beaker period. At this time, a small Beaker grave in a cist is set within the henge near ‘stone’ hole 8 that contains only a crushed Beaker (Piggott 1947-8: 84). The North Grave is also constructed, which consists of a cist that is half-filled and covered by stones and marked by a standing stone (Figure 6.30a) (Piggott 1947-8: 88). An upright Beaker was found at one end and fragments of a second were found in the cist, along with the enamel of human adult teeth (Piggott 1947-8: 89). The cist was further demarcated by an arc of pits set around it (Barclay 1999: 39).

Cists A and B were then placed around this North Grave. Cist A was filled mostly with cairn material, but a Food Vessel remained intact on its side. One slab of this cist was decorated with cup marks (Piggott 1947-8: 96). Cist B was embedded in the clay under the later cairn and held the cremation burial of a young adult female. Cup marked rocks were also included in her grave (Piggott 1947-8: 98).

Phase 4 – a cairn was then erected over these two cists, which was later enlarged to twice its size to cover the rest of the burials in the henge (Barclay 1999: 39). Two urn burials were then inserted into this cairn in its upper layers. Both of these consisted of Collared urns that had been inverted over cremated remains (Piggott 1947-8: 99). The first was accompanied by a calcined bone pin, whilst the second with a bone pin, burnt flint and charcoal (Piggott 1947-8: 100).

Phase 5 – in the final phase, four extended inhumation burials were put within the confines of the henge. Piggott assumed these must be Iron Age since he felt it was unlikely that Christians would have been buried in a pagan location away from consecrated ground (Piggott 1947-8: 76, 100). However, Barclay (1999: 17) disagrees since Christian burials are now known to have been placed in similar locations.

24. Tartravan, Linlithgow, West Lothian

A note of the donation of a Beaker from Tartravan is made in PSAS, dated 1886 (*PSAS 21*).

25. Mossplat, Carluke, Lanarkshire

In a short note, the Society of Antiquaries of Scotland (1862) records the donation of a “drinking cup”. It is stated that it was found under a stone cairn on a hill in Carluke, Lanarkshire in 1810.

26. Wester Yird Houses, Carnwath, Lanarkshire

At Carnwath, Lanarkshire, about 1870, a cist was found under a stone cairn that was being quarried to build a farmhouse for Mr. Bryce and his family (Rankin 1872-4: 61). The capstone of this cist was decorated on its underside with rock art in spirals and triangular shapes, cut off mid-motif in some cases. This is something that has been noted elsewhere and is thought to be the re-use of Early Neolithic art in the Late Neolithic/Early Bronze Age (Bradley 1998). The cist is reported only to have contained a Beaker.

27. Drowsy Brae, Shieldhill, Libberton, Lanarkshire

In a note of donations to and purchases for the museum (1950-1), a Beaker is listed that was found in 1911 in anticipation of road works. It was located on a gravel slope overlooking the Clyde River and Thankerton.

28. Cairny, Lanarkshire

Near the top of the hill, at 260 m OD, a cairn was in danger of destruction by quarrying and was, therefore, fully excavated to find a single cist in the centre (Maxwell 1975-6: 301). The cist had been fully robbed long before (it was thought to have been in Medieval times as a sherd of green-glazed pottery was found inside) but parts of a jet armlet were found within the cairn rubble, as were a few sherds of coarse pottery (Maxwell 1975-6: 303). A few pieces of bone from a young male was found just outside the cist and high levels of phosphorus inside the cist suggest a cremation burial rather than an inhumation had been placed there.

Underneath the cairn on the original land surface a spread of charcoal flecks, cremated bone, a flint scraper, a chert flake, and sherds of coarse pottery (possibly Beaker) were discovered (Maxwell 1975-6: 303). Although it is not common to find cremation burials in association with Beakers, it is less uncommon in the southeast of Scotland and Maxwell (1975-6: 303-4) notes examples at Limefield (Crawford) and Ferniegair, Lanarkshire.

29. Blackhouse Burn, Lanarkshire

Ahead of a reforestation project on Pettinain Hill, a site near the summit, was excavated in 1985 (Lelong & Pollard 1998: 13, 19). The site consisted of two stone enclosures, the larger 300 m in diameter and almost a kilometre in circumference, and a smaller one only 50 m across, surrounding the two natural springs that are the source of the Blackhouse Burn. Originally, the land had been a marsh, due to the springs, almost to the point of being a loch, but it had been drained in the 19th century (Lelong & Pollard 1998: 16). Despite this, the enclosure was a palimpsest of activity from Neolithic to historical times (Figure 6.31a).

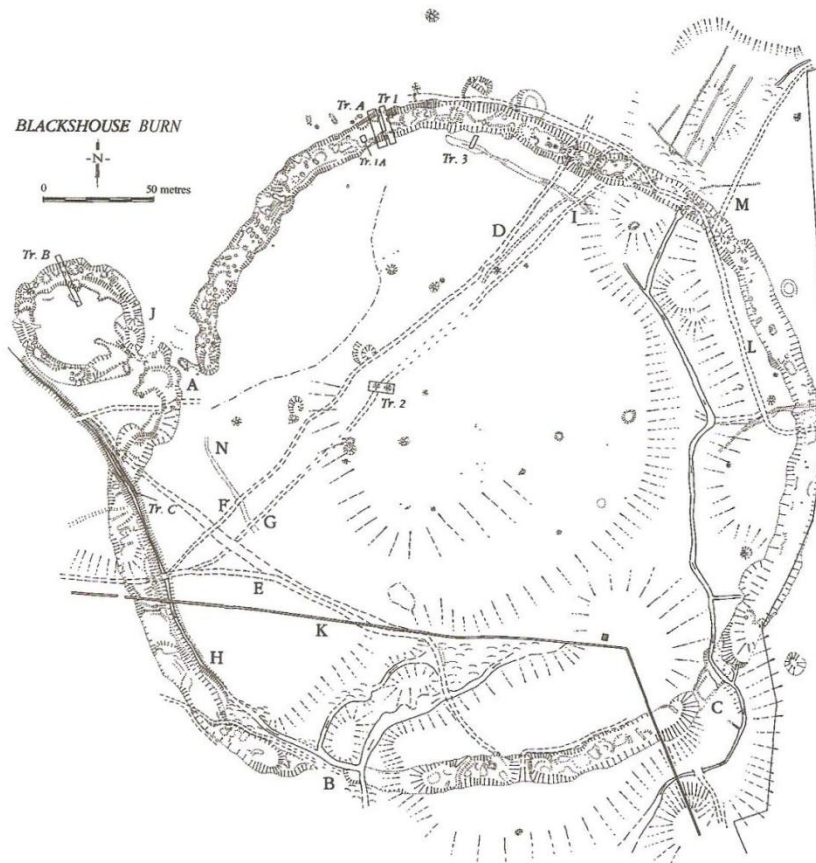


Figure 6.31a: Blackhouse Burn, site plan (from Lelong & Pollard 1998, 16)

The earliest activity was found under the stone bank in the form of stake-holes, suggesting ephemeral structures and a hearth (Lelong & Pollard 1998: 22, 26). The material of the hearth was not dated, but since this activity was sealed by the stone enclosure, it must have existed in the Neolithic or earlier.

The stone bank itself seems to have been built in two parts. Firstly, oak posts were set in a double ring around the perimeter of the enclosure (Lelong & Pollard 1998: 26). To the south inside the enclosure, a portion of the old ground surface survived to reveal that a cobblestone paving had been set at this time over top of a charcoal-rich surface. The double ring of posts was then filled in with stone rubble to create the banked enclosure (Lelong & Pollard 1998: 27). At some point later on, the bank was enhanced with stone slabs, widening it and reinforcing the oak posts (Lelong & Pollard 1998: 28). To the east, the second, smaller enclosure seems to have been built around the same time, as its only entrance matched up with a break in the perimeter of the larger enclosure. A large pit was found in association with the smaller enclosure, which is thought to have been dug to drain the area whilst the enclosure was being built, or to form support for the walls as they were constructed (Lelong

& Pollard 1998: 34). Within the waterlogged contexts, the scars of a tool that ‘peeled’, or vertically cut the peat, could be seen on the pit edges and clay and wood lining in the pit’s base remained in place (Lelong & Pollard 1998: 32).

The presence of waterlogged post-pipes in the oak post-holes shows the posts were left to rot *in situ*. Once this had happened, the bank underwent a final reconstruction where it was raised and capped off with more stone. Possibly at this time, the cairns found within the enclosure were built. Upon excavation, AOC Beaker sherds were found under and near them, which led Lelong & Pollard (1998: 30) to conclude they were contemporary with the final stages of the enclosure wall. This indicates that the history of this monument is long. A radiocarbon date from one of the oak post-pipe dated the initial structure to 2035±55 BC (Lelong & Pollard 1998: 13). Although old wood effect could call this date into question, since it was taken from oak, the longevity of the monument still stands as it is estimated that oak posts can stand up to 130 years before they rot (Lelong & Pollard 1998: 45). Moreover, in a region known to be rich in archaeological remains, the reuse of this monument into the Bronze Age with the construction of the cairns demonstrates the importance of the site.

Unconnected to the initial enclosing of the springs, the site continued in use until historical times. Within its perimeter are found the remains of drainage ditches, paths, tracks constructed up to present time. A dyke, not shown on the 1858 ordnance survey map is clearly marked by 1898 (Lelong & Pollard 1998: 18), and clay drainage pipes from the late 19th or early 20th century were prevalent during excavation (Lelong & Pollard 1998: 35). Today, the area is a mixture of reforested land and improved heath.

30. Newbiggingmill Quarry, Lanarkshire

During quarrying, a cist was found with an inhumation of an adult female, two Beakers, and a flint knife. The larger of the Beakers was behind the head of the woman with the knife inside it, whilst the other Beaker was behind her spine to the north of the cist (Welfare 1976: 73-75). It is thought that due to the presence of the smaller Beaker and its unusual placement in the grave, there may have been a baby or newborn buried here as well.

31. Crawford, Lanarkshire

Around 1880, a cairn was opened by Mr. Adam Sim of Coulter Mains at Crawford. It had two cists inside, one of which contained a Beaker and a bronze ring (*PSAS 1883, 451-2*). It is recorded that Sim also found a bronze spear-head in this burial. A second Beaker, “in capital preservation” was recorded from Crawford that was found in a cairn during quarrying (Irving 1855: 7). It was half-filled with cremated remains.

32. Boatbridge Quarry, Thankerton, Lanarkshire

In 1970, two cists, set 14 m apart, were found at a gravel quarry on a ridge that overlooked the River Clyde from 226 m OD (Clarke et al. 1984: 557). The first contained the inhumations of a male, aged 44-48, who had osteoarthritis of the spine to such a degree that he would not have been able to move his lower back. Also in this cist were the remains of a child. The second cist had a primary deposit consisted of the inhumation of an adolescent with a Beaker. A radiocarbon date of 3824 ± 32 bc was taken from the femur, scapulae and sacrum of the skeleton, which has been re-calibrated by National Museums Scotland to 2340-2200 cal BC (Sheridan 2007: 110).

33. Stoneyburn Farm, Crawford, Lanarkshire

The excavation of three cairns was done in anticipation of the widening of the M74 in 1991. This was done during the same survey that revealed Lintshie Gutter, which is located only 2 km away (Banks 1995: 285). This site consists of three cairns built on a glacial hill at 270 m OD in the Upper Clydesdale. All of the mounds were very small, the largest extending only 30 cm above the ground level, and so they were found undisturbed (Banks 1995: 291). The largest cairn, 002, was 7.3 X 6.3 m in diameter and was built by creating a circle of larger boulders, then adding smaller ones into the centre (Banks 1995: 291-2). Incorporated into this fill were Early Neolithic Carinated Bowl sherds, flints and patches of cremated bone – all thought to have accidentally been part of the backfill upon the creation of the cist. Under all three cairns, a dark, greasy layer was found instead of the old ground surface and it is thought the ground was prepared for the building of the cairn with a layer of turf (Banks 1995: 194). Underneath this layer under cairn 002 were a series of pits, postholes, stakeholes, and a gully, which contained material from different periods including, Carinated Bowl, post pipes,

Beaker sherds, one grain of six-row barley and charcoal (Banks 1995: 294). Only one of these pits had material from more than one period.

Cairn 003 had a similar make up to cairn 002, but under its dark, greasy layer was a cremation pit that contained a pygmy cup, inverted over the remains of a female, aged 25-30, four faience beads and a hammerstone (Banks 1995: 297). A radiocarbon date taken from birch charcoal from the cremation was calibrated to 1878-1695 cal BC.

From the proximity of cairn 004 to cairn 003, it was thought they were largely contemporary, and a radiocarbon date of 1737-1613 cal BC supports this (Banks 1995: 299). Under the dark, greasy layer a second burial pit was found that contained several layers and a sealed cremation burial at the bottom. The remains of a woman over 40 years, who suffered from very bad arthritis, were found within this layer along with a faience bead (Banks 1995: 299).

The site formation is thus thought to have begun in the Early Neolithic, c. 3300-3000 BC, with the digging of the pits under cairn 002 (Banks 1995: 329). Posts and stakes were also raised, which burnt *in situ*, and the pits were eventually backfilled, some with sherds of Carinated Bowl within them. Later, another pit was dug into which Beaker sherds were deposited, and towards the end of the Beaker period, the surface under cairn 002 was prepared for its construction. Finally, in the Early Bronze Age, c. 1900-1500 BC, the two females were cremated and buried and cairns 003 and 004 constructed to mark their graves.

34. Cloburn Quarry, Cairngryffe, Lanarkshire

In 1986-7, a Bronze Age ring cairn was salvage excavated at Cloburn Quarry (Lelong & Pollard 1998: 105). An Iron Age hillfort just above the ring cairn was known to have existed until its destruction during World War Two and from the shape of this site, it was anticipated to be an unenclosed platform settlement just pre-dating the fort (Lelong & Pollard 1998: 106). However, excavation revealed a multi-component cairn, 22 m in diameter, overlying an Early Neolithic surface (Figure 6.32a). Six phases were determined from excavation: 1) Early Neolithic activity; 2) pre-cairn features; 3) construction of embankments, pits and ash spreads; 4) red-chip deposit; 4/5) outer ring cairn; 5) platform cairn (Lelong & Pollard 1998: 108).

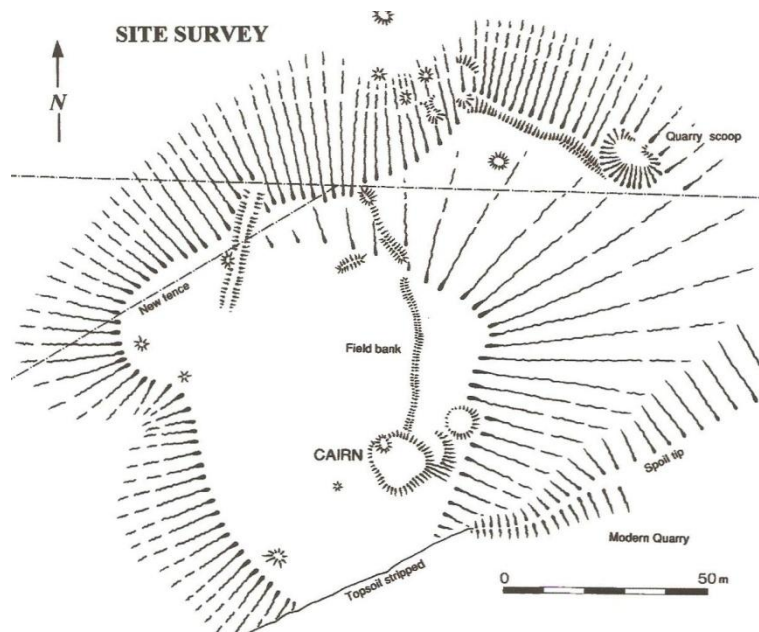


Figure 6.32a: Cloburn Quarry, site plan (from Lelong & Pollard 1998, 107)

Phase 1 – a spread of randomly-spaced Early Neolithic pits that contained Carinated Bowl sherds, most likely from a domestic site.

Phase 2 – the pre-cairn features include a ‘scoop’, pits, a low stone wall, and stone rings (Figure 6.33a) (Lelong & Pollard 1998: 110). The central scoop measured 3 m in diameter and was 0.1 m deep. A post-ring, defining the perimeter of this scoop was set, and pits were dug into the scoop. One of these pits contained a cremation, whilst the others held angular stones and charcoal.

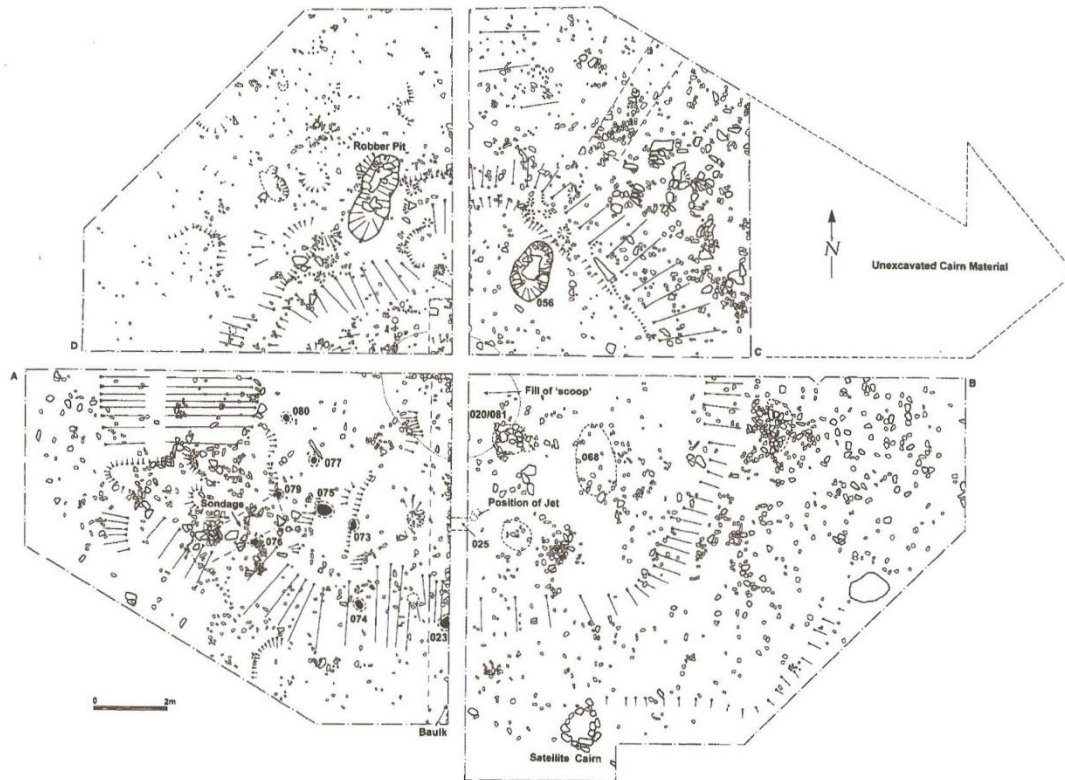


Figure 6.33a: Cloburn Quarry, pre-cairn features plan (from Lelong & Pollard 1998, 111)

Surrounding these features, an outer post-ring consisting of an arc or circle of timber posts was set, “...to echo the central circular scoop” (Lelong & Pollard 1998: 112-3), and a stone kerb formed the external perimeter (Lelong & Pollard 1998: 113). Within the boundary of this area were several cremations (details of these were not identifiable). A radiocarbon date was determined from one of the postholes as 1890-1630 cal BC, which coincided with a second date of 1910-1620 cal BC from one of the cremations (Lelong & Pollard 1998: 113).

Phase 3 – during the third phase, the central scoop was backfilled and a cremation pit was put in its centre (Lelong & Pollard 1998: 115). The inner low wall was covered by an earthen bank and the outer post ring was burnt down and replaced by a second low bank. Ash, charcoal and potsherds were found in horizons over the monument as if it was being used as a pyre (Lelong & Pollard 1998: 115).

Phase 4 – in this phase, the monument became a cremation cemetery. Red felsites chips were placed in a sandy soil matrix within the perimeter of the outer earthen bank (Lelong & Pollard 1998: 115). Cremations were mixed into the red-chip layer, rather than being put in pits, as well as Beaker sherds, stone tools, and jet beads, and the red-chip deposit built up

over time in this way (Lelong & Pollard 1998: 116). The remains were found along with four sherds of pottery (two from a Food Vessel and two from a Vase Urn that had been reused to polish something before deposition). Although fragmentary, the cremations were determined to include the remains of a middle-aged male, an adult female (found near a Food Vessel), a young adult, and an adult. In addition, an entire Food Vessel was found in direct association with the cremated remains of a young female and a foetus/neonate was discovered in a pit (068) that had been cut into the red-chip layer (Lelong & Pollard 1998: 116-7). A second pit (056) was also uncovered that contained a cremation in its base and a sealing layer of clay on top (Lelong & Pollard 1998: 117). It is important to note that amidst the cremated material in the red-chip layer, the cremated remains of sheep/goat were also found, perhaps included in the burials as food for the dead (Lelong & Pollard 1998: 120).

Phase 4/5 – an outer ring of stones was placed surrounding the monument (Lelong & Pollard 1998: 118). This is given its own phase since it is not centred around the central scoop like the other rings, but at times runs into the earthen bank and other times stays away from its edge. Food Vessel sherds were found in association with this ring of stones.

Phase 5 – at this time, the entire central area was filled in with stone and earth to make a platform cairn. The outer ring of stones from phase 4/5 became this cairn's kerb (Lelong & Pollard 1998: 118). A very small satellite cairn was also built just beside the cairn at this time.

Lelong & Pollard (1998: 119) draw comparison to Stoneyburn, Crawford in Lanarkshire for this site since it shows a similar continuation and final structure.

35. Lanarkmoor, Lanarkshire

In a note of donations in PSAS 5 (1865), two Beakers are listed as having been found in a sandpit on Lanarkmoor.

36. West Water Reservoir, West Linton, Peeblesshire

The land in the Pentland Hills, above West Linton, was farmed moorland until the construction of the West Water Reservoir in the 1960s (Hunter 2000: 118). Although archaeology is well-documented in the region, it was still somewhat of a surprise when

Bronze Age cists were exposed by bad weather and low water levels on an island in the reservoir in 1992. The island, which had originally been a small raise of land, or knoll, and was fully excavated and found to be a flat cemetery with nine cists containing cremations and inhumations (Figure 6.34a). As more archaeological remains were found in the reservoir, this came to be called Area A (Figure 6.35a). Acidic soils had attacked the bones of the

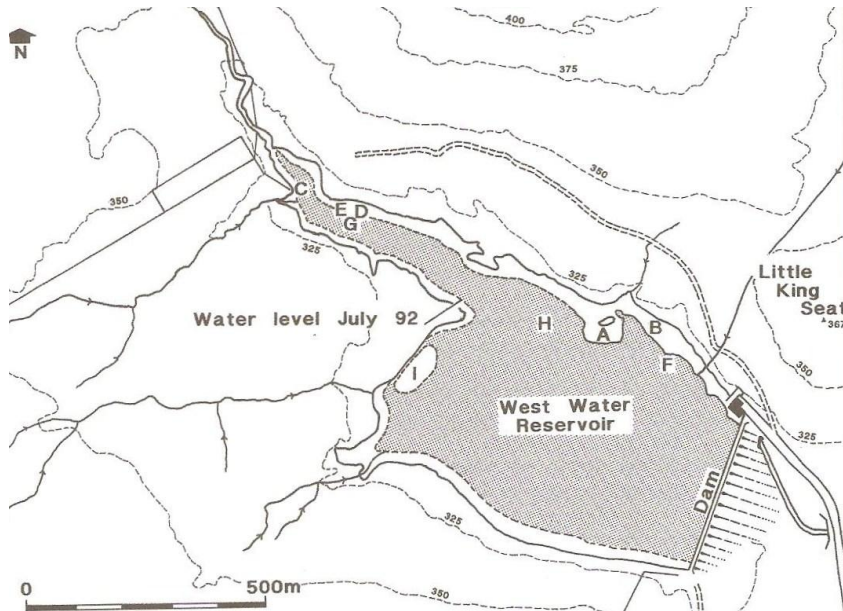


Figure 6.34a: West Water Reservoir, site plan (from Hunter 2000, 116)

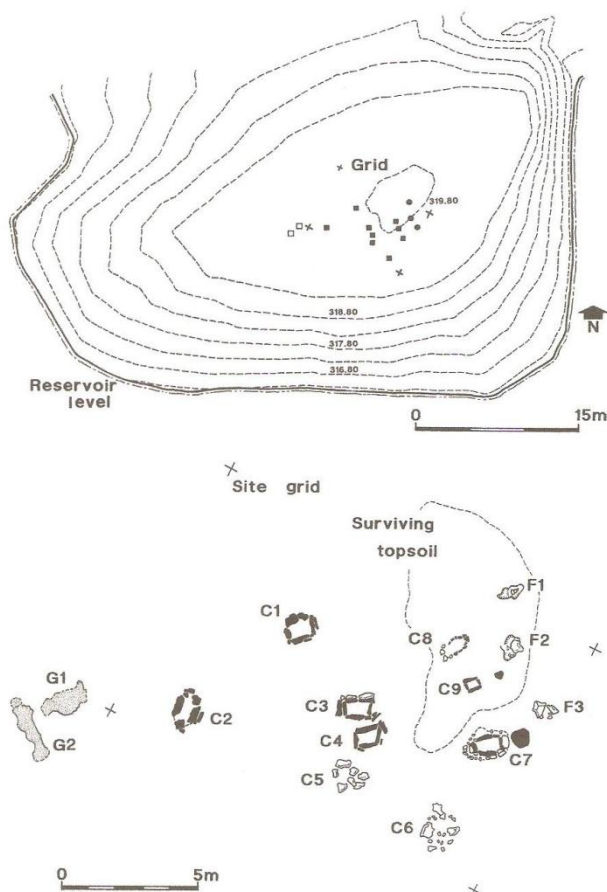


Figure 6.35a: West Water Reservoir, plan of Area A (from Hunter 2000, 119)

inhumations, but much could still be discerned by the remains of tooth enamel found in the graves. Palynological analysis was also conducted and a remarkable amount of information was determined from the remains.

Cist 1 contained the inhumation of a sub-adult; the remains of meadowsweet were found in the bottom of the cist (Hunter 2000: 122).

Although the age of the individual in Cist 2 could not be determined, grave goods were present in the form of a flint tool, a chert flake, a piece of polished haematite, and a Food Vessel set upright at one end of the cist (Hunter 2000: 123).

Cist 3 held the inhumed remains of a child, aged 3-6 years old, with a necklace of lead beads in a position suggesting it had been around their neck (Hunter 2000: 124). Importantly, this is the first example of lead used in Britain or Ireland (Hunter 2000: 140). Also included were an agate core, a quartz pebble and meadowsweet pollen at the base of the grave.

In Cist 4 were the remains of an 11-13 year old, buried with a bronze awl and Food Vessel urn placed by their head (Hunter 2000: 125).

Both Cist 5 and 6 were empty.

Cist 7 is of particular interest as it contained two individuals who seem to have been buried at different times. An adult inhumation had first been put into the cist with a Food Vessel and meadowsweet by their head (Hunter 2000: 128). From the fill of the cist, it seems the cist had been left open to weather until the death of a second individual, aged 17-19, who was cremated and then placed in the cist with a flint tool and two bone beads. The Food Vessel interred with this cremation, however, sat upright beside it, rather than containing it (Figure 6.36a) (Hunter 2000: 128-129).

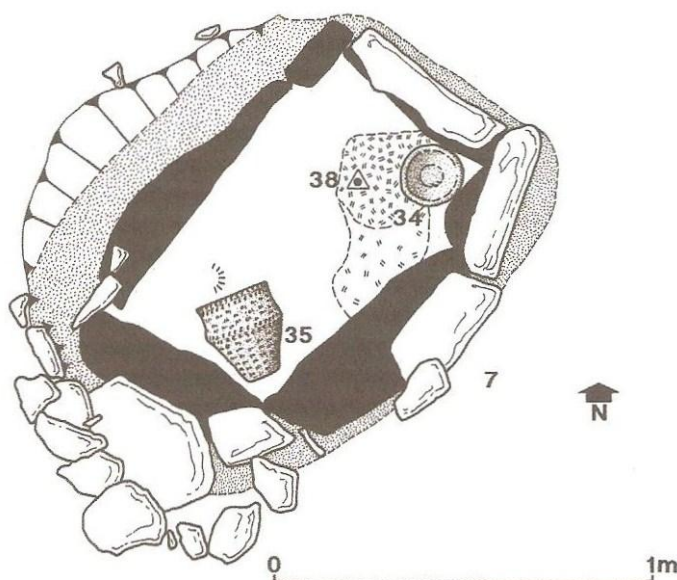


Figure 6.36a: West Water Reservoir, plan of Cist 7 (from Hunter 2000, 127)

Cist 8 held the cremated remains of an 18-25 year old, whilst Cist 9 contained the cremation burial of a 12-16 year old. Neither produced any other material (Hunter 2000: 129-130). All of the cists had been deliberately backfilled to bury the inhumations and cremations placed in them – a practice which, although not common in the Borders or Northumberland, is known elsewhere in Scotland (Hunter 2000: 171).

Taking advantage of the low water levels and in the attempt to preserve any other archaeology that might be in the reservoir, Hunter expanded the excavation area. To the west of the flat cemetery, two hollows (both with only possible fills) were found alongside three features. The first of these features was a pit with only a broken quartzite cobble (Hunter 2000: 131), but feature 2 held an orthostat, measuring 0.5x0.5x0.8 m set on an angle over a fill containing sherds of three Beakers and six broken quartzite cobbles.

Feature 3 was determined unrelated to the other two features as it contained a scatter of stones, suggesting it might have been a cist, and piece of silver with a cutmark on it resembling one which may have been done by an iron knife (Hunter 2000: 131).

In Area B, located on the mainland just to the northeast of Area A, two cairns were explored (Hunter 2000: 160). Although both were determined to be clearance cairns, an anvil stone and a chert flake were found in the westerly one. A random find of an unstratified Impressed Ware sherd was also recorded.

Another concentration of archaeological remains was found in Area D, at the top of the reservoir near its source to the northwest of Areas A and B. Here, a rectangular cooking pit, lined with orthostats along one side was found (Hunter 2000: 160-161). One half was shallower than the other and contained large quantities of charcoal, a sherd and a microlith. The deeper end of the hearth held a large number of fire-cracked rocks. The charcoal from the pit fill was radiocarbon dated and calibrated to 1690-1490 cal BP, putting it comfortably into the burnt mound range (Hunter 2000: 162).

Of the nine areas explored in this operation, three (and possibly a fourth) produced evidence of a well-occupied territory during prehistory – not unlike many places in the immediate region. Further exploration was not in the scope of this project, but it is a promising area for future work if the water levels co-operate again.

37. Oliver, Tweedsmuir, Peeblesshire

In a note of donation from 1923, a Beaker is listed as having been found in a cist at Oliver, Tweedsmuir, Peeblesshire. It was donated by Mr. Lawrence Tweedie-Stodart of Oliver.

38. Drumelzier, Peeblesshire

Near the bank of the River Tweed, J. Craw noticed a low mound whilst out walking in 1929. The edge of the bank had eroded away in to the river and a cist could clearly be seen protruding (Craw 1930-1: 363). The mound measured 12 m in diameter and 0.6 m high. Later that month, Craw excavated the area to find an expansive Bronze Age cemetery within. The cist that was found initially was empty, save for a fill of yellow sandy subsoil, different from that surrounding the area. At the centre of the mound, a second empty cist lay alongside a circular pit, 0.5 m wide that was filled with charcoal. A full excavation of the mound then revealed a further five cists, two possible cists, and two settings of stones (which are often found surrounding urns to protect them) (Craw 1930-1: 365). These were set within two superimposed rings of stone, evidently indicating two phases when the mound was built, then when it was enlarged.

Of particular interest was Cist 1, located near the centre of the original stone kerb (and mostly likely the original burial) (Craw 1930-1: 367). It was filled with soil, but in this was a flint saw and flakes, and an early AOC Beaker, the sherds from a second one, and a sherd of “Neolithic or Overlap pottery” (Craw 1930-1: 367). These latter ceramics were linked by Craw to the remains at Hedderwick .

The rest of the cists were empty, except for Cist 3, which yielded charcoal and a worked flint, and Cist 6, which contained a single charred hazelnut shell (Craw 1930-1: 367). Within the two settings of stones, a fragment of iron was found in one and fragments of a Cinerary Urn in the other. Craw (1930-1: 367) notes that all of the secondary burials were made in the north side of the mound, which is unusual, but likely because it was the part of the monument furthest from the river.

39. Harehope Cairn, Peeblesshire

The Harehope Cairn is located at 260 m OD and is 18.5 m in diameter and 0.5 m high (Jobey 1978-80: 97). It was built in two phases, beginning with a smaller kerbed cairn that was later enlarged and a second kerb added and interred at least 12 burials (Figure 6.37a).

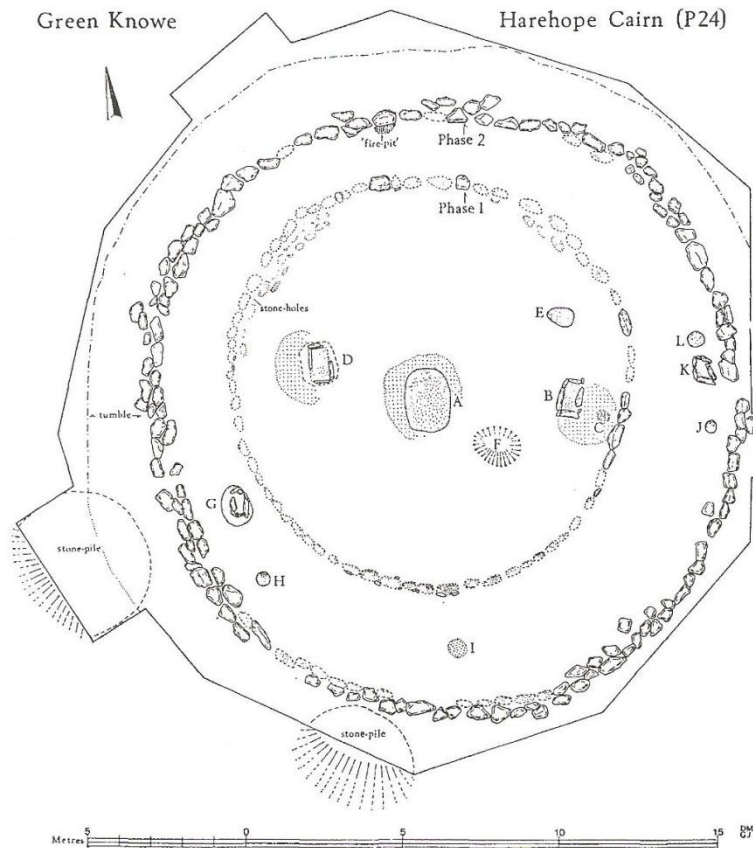


Figure 6.37a: Harehope Cairn, site plan (from Jobey 1978-80, 97)

The cairn was first built over Inhumation A. This rectangular grave pit was dug into the natural ground surface under the cairn and contained with the inhumation 32 shale V-bored conical buttons, a shale V-bored oval button, a shale belt fastener and a flint knife (Jobey 1978-80: 99). Carbonized oak and hazel in the silt of the grave gave a *terminus post quem* of 2345±112 BC for the remains.

Inhumation B was a probable female in a cist. Silt just covered the bottom of the structure and a lignite necklace of 125 beads accompanied the burial (Jobey 1978-80:99).

Cremation C was also dug into the natural soil under the cairn. The cremated remains of an adult and child were in a pit along with 300 small sherds of pottery, most likely Collared Urn, charcoal and ash (Jobey 1978-80: 99).

Inhumation D was in a cist that had been above the cairn's base and so was probably later than the inhumations just described (Jobey 1978-80: 100). Silt had filled most of the cist, but it is thought it had been robbed in antiquity as it was empty.

Cremation E was found in a pit dug down to the bottom of the cairn (Jobey 1978-80: 101). It consisted of the remains of an adult and rim sherds from a late-style Beaker were found within this fill.

Pit F was found to be empty, but its V-shaped profile suggests that it had been a stone hole (Jobey 1978-80: 101).

In the second phase of the cairn, a second kerb was built surrounding the first and the entire monument built up with more rubble packing. Into this, one more inhumation and five cremations were placed. Inhumation G consisted of a crude cist/pit that had silted up (Jobey 1978-80:101). A Step 5 Beaker sat in the corner and a large fragment of a Step 4 Beaker was also in the fill along with random sherds of a Step 2 Beaker. It is thought this represents a reuse of this grave.

Cremation H was found in a small pit with sherds of a pot that had incised decoration (Jobey 1978-80:102). Jobey (1978-80:102) suggests that this is a later style Beaker rather than Grooved Ware on account of its fabric and form. A radiocarbon date from charcoal in the pit (alder, hazel, elm) was determined at 2810 ± 112 BC.

Cremation I consisted of calcined bone and charcoal on the surface of the cairn between the two kerb rings (Jobey 1978-80: 102). Cremation J, however, was more substantial. It consisted of cremated human bone of a child, aged 4-5 years, set in a pit with a Collared Urn inverted over it and an accessory vessel. A radiocarbon date on the charcoal was obtained, dating to 1564 ± 112 BC.

Cremation K was found on the old ground surface under the cairn, set within a stone setting. The remains of a child and older adult were present (Jobey 1978-80: 102).

Finally, cremation L was found in a pit on the old ground surface within the cairn extension. The remains were those of two people and radiocarbon dates on the burnt wood and ash in the pit revealed a date of 1908 ± 112 BC (Jobey 1978-80: 103).

Also found mixed in with the cairn material were: the rim of a Beaker, flint flakes, a flint knife, and four flint scrapers. These would seem to give the cairn a firm early date for cairns within the Beaker period (Jobey 1978-80: 103).

40. Camphouse Farm, Edgerston, Roxburghshire

At 244 m OD, a 4 m diameter stone circle was found to have a Bronze Age cemetery in its interior (PSAS 81: 191). Within this “grave-circle”, a Beaker was found. Also, sherds from two Food Vessels were uncovered from cairns at this site.

41. Lanton Mains, Jedburgh, Roxburghshire

In October of 1869, a plough hit the capstone of a short cist grave near Lanton Mains farm (Hilson 1876: 347). Inside was a flexed inhumation accompanied by 20 unworked flints and a Beaker.

42. Bedrule, Jedburgh, Roxburghshire

The list of donations from 1951 (PSAS) to the National Museum of Scotland includes a Beaker found at Bedrule, near Jedburgh.

43. Wester Wooden, Eckford, Roxburghshire

During ploughing, a cist was found on Wester Wooden Farm (Winning 1885-6). Inside, a mixture of sand and charred wood filled the cist and two flints and a Beaker were found amidst this.

44. Easter Wooden, Eckford, Roxburghshire

In February 1889, a cist was found by Mr. Purdom whilst ploughing and opened to reveal sherds of a Beaker (Winning 1890-1: 28). John Winning was then sent to inspect the cist, but he found nothing more than sand and a few more sherds. Winning comments that the Beaker

is unique as it has incised decoration on the bottom, something which Greenwell told him that he had seen on Food Vessels many times, but not on Beakers (Winning 1890-1: 29). Winning also notes that the location of the find, on a gravel terrace between the Kale Water and the River Teviot seems to have been an attractive spot for such burials in prehistory, most likely because of their good drainage and easiness to excavate (Winning 1890-1: 28).

45. Knock Hills, Edgerston, Roxburghshire

Near Edgerston, a little way up the hill at about 213 m OD, two cairns were found containing burials. The larger of these two was recorded as having an outer ring, or henge ditch, 24 m in diameter (Oliver 1929: 372). Inside the cairn were six burials, without cists, but each with a large flat capstone above the pits into which they were deposited. The finds were as follows (Oliver 1929: 373):

Burial 1 – bone, two lignite beads, flint flake, and a piece of worked flint.

Burial 2 – charcoal

Burial 3 – jet button, flint arrowhead (barbed and tanged), two pieces bone.

Burial 4 – bones, charcoal, ‘rough’ pot sherds, flint flake, worked flint.

Burial 5 – shale button, flint flakes.

Burial 6 – bone.

In the second cairn, there were not burial deposits found; however, a central area, marked by larger stones, contained charcoal, burnt bone, and sherds from a Beaker (Callander 1929: 377).

Although the pottery from the first cairn was not recognized in the report, it would seem from the other artefacts that this site dates to the Beaker period. The term ‘rough’ pottery sherds, used in the report, may indicate that these are Tyne-Forth Regional Ware ceramics.

46. Littleton Castle, Kelso, Roxburghshire

This Beaker is recorded in the literature, but no context is given (Mitchell 1933-4: 187).

47. Springwood, Kelso, Roxburghshire

During the ploughing of reclaimed land a cist was found in 1967 near the convergence of the rivers Teviot and Tweed (Henshall & MacInnes 1967: 79). Inside was a clutter of poorly preserved bones, a broken Beaker, five barbed-and-tanged arrowheads, and a bronze awl (Henshall & MacInnes 1967: 81). It is thought the cist may have been opened in the past, causing the mess. The skeletal remains, although fragmentary, were found to be those of a possible male, aged 25 or under (Henshall & MacInnes 1967: 85).

48. Lauder Hill House, Berwickshire

This Beaker is unpublished, except for its inclusion in Clarke's (1970) corpus.

49. Cadger's Cairn, Gordon Moss, Berwickshire

In an area that was moorland since records began, the land began to be cleared in the second half of the 19th century to create more farmland (Stobbs 1882-4: 115). At this time Cadger's Cairn was found and dismantled. Situated on a slight knoll, the cairn was of a large size: "...when [the stones] came to be driven away they supplied more than a hundred cart-loads" (Stobbs 1882-4: 116). At the bottom of the cairn the remains of an urn was found and several artefacts including, a gold ring, the hook from a silver brooch, a piece of silver bracelet, two silver ingots, and an iron spearhead, were removed. Stobbs (1882-4: 117) states that the remains were all found together under the cairn, but believes the metals were a secondary interment (perhaps a hoard) put into the cairn much later since the urn is clearly from the Bronze Age and, "...of the type that held food." (Stobbs 1882-4: 116). The image in the volume clarifies that it is a Food Vessel rim.

50. Macksmill, Gordon, Berwickshire

On a natural sandy hillock, a Beaker was found during ploughing, by one Mr. Leitch, in May 1885 (Hardy 1885-6: 193; Anderson 1886: 100). The vessel was found in almost complete

form, lying on its side, with no other associated artefacts. Hardy (1885-6: 193) notes that the location of burial was not unlike a round barrow, albeit naturally made.

51. Hoprig, Cockburnspath, Berwickshire

In an area known to have Beaker burials in cists, deep ploughing in anticipation of a potato crop revealed a location of several burials in 1887 (Hardy 1887-9: 131-2). Part of a Collared Urn, sitting inverted over a cremation, was hit by the plough, smashing it, and in the night, local boys smashed it further. This brought attention to the area and ensuing excavation uncovered a cist with a flexed inhumation, three burnt flints, and red hematite iron ore (for fire-making) was found (Hardy 1887-9: 134). To the south of this, a pit containing burnt bones and charcoal and ‘urn’ sherds (which are not illustrated and so cannot be identified to tradition) were found. The base of this pit was a large stone slab, which was found to be the capstone on another cist that contained two Beakers (the second Beaker is listed as a Food Vessel in the report, but the illustration is of a small Beaker) (Hardy 1887-9: 136).

52. The Duns, Grueldykes, Berwickshire

In a list of known Bronze Age sites found in Berwickshire, the details of a Beaker found at Grueldykes on the railway line is recorded (Craw 1919-22: 184). The site is described as being on a knoll near Duns station and was discovered by workmen building the railway there in 1863. A cist was found containing the inhumation of a male and a Beaker.

Also in this region is the site of Dunslaw in Little Duns Law Field. A cist was found in 1890, but was empty and, therefore, unrecorded.

53. Manderston, Berwickshire

On a gravel knoll, a dig took place and a cist was found containing a Beaker amidst the badly preserved bones of a flexed inhumation (Turnbull 1882-4).

54. Doons Law, Leetside Farm, Whitsome, Berwickshire

In 1995, a cist was found during the ploughing of a field. It was under a mound, 11 m in diameter, which had been walled and set aside from the area of cultivation. Inside, an inhumation was discovered with a Beaker set near the skull (Clarke & Hamilton 1999: 189). Upon excavation, flints, a copper awl, burnt bone and charcoal, and skeletal material were recovered. The inhumation was that of a female, 25-35 years old, and a radiocarbon date from the jaw bone set the burial at 2200-1800 cal BC (2 sigma) (Clarke & Hamilton 1999: 195). Pollen analysis showed that flowers of *Filipendula* had been put in the grave near the woman's head, perhaps as a pillow, head dress, or even a libation of mead (Clarke & Hamilton 1999: 199). Pollen from *Brassicaceae* flowers was also found in large quantities.

55. Broomdykes, Edrom, Berwickshire

In the same list where Duns, Grueldykes is found, Broomdykes is described as a site where a cist was found on a ridge (Craw 1919-22: 185). Bones and a Beaker were found with an "ochreous" stone.

56. Harehaw Hill, Chirnside, Berwickshire

Whilst digging a reservoir at 142 m OD, a cist was found with an inhumation and a Beaker standing upright in the corner (Craw 1903-5). No contextual associations are mentioned in the report.

57. Pace Hill, near Crookham, Northumberland

Inspired by the finds made by Greenwell (Greenwell & Rolleston 1877), Stopford et al. (1985) excavated at Pace Hill and found three cists and an unenclosed burial in a hollow. Cists 1 and 2 were disturbed and contained nothing (Stopford et al. 1985: 127-128), whilst cist 3 (located between cists 1 and 2) only had a large piece of quartz. However, burial 4, which had no cist, yielded a complete beaker pot.

58. Grindon, Norham, Northumberland

This Beaker is mentioned in the literature (Abercromby 1903-4: 339), but no context is given.

59. Scremerston Hill, Northumberland

This vessel is listed by Clarke (1970), but no correct reference could be found that gives its context.

60. Ross Links, Northumberland

In a sandy promontory at the north of Budle Bay, Parker Brewis and Francis Buckley set out to look for Mesolithic sites in 1924 (Brewis & Buckley 1928: 13). They gathered 200 sherds of pottery as well as the lithics and a bronze pin, which comprised mostly of Beakers (represented by 10 vessels), but some were also of the Food Vessel type (three vessels) (Brewis & Buckley 1928: 13). The Beakers are recorded in two groups, A and B: the former being what is now known as AOC, and the latter sherds dating to later in the Beaker period. No further details of the provenance or associations of these sherds is given in this report.

To the east of this spread, an area over 4 m long, was excavated and found to have a, “...floor of rounded pebbles (probably drift)”, overlying a deposit of burnt sand. Within this matrix, quartzite hammer stones, over 50 sherds of pottery, fire-cracked rock, clay lumps, disc-shaped stones, shale, and large flat stones, were uncovered (Brewis & Buckley 1928: 22). All of the pottery has a coarse fabric like Bronze Age wares, but only one of these sherds had diagnostic features.

The site was interpreted as an “urn factory” (Brewis & Buckley 1928: 24). Brewis & Buckley (1928: 24) believe the stone artefacts were used to prepare the inclusions for the pottery; however, this conclusion is questioned. An area of burnt clay was also found here that extended several feet, which could be interpreted as the floor of a burnt-down house. Hammerstones, fire-cracked rock, and other lithic tools are all commonly found on Bronze Age domestic sites in the area. This is not to say that Bronze Age pottery was not made here, but the current evidence from the region suggests that ceramics were being made on a smaller, domestic scale than was thought in the 1920s.

61. Ford Common, Northumberland

Recorded as Barrows 185 and 186, the first was described as a cist found on a knoll, whilst the second was an upstanding mound. ‘Barrow 185’ was found by the plough when the cist capstone was hit and partially moved (Greenwell 1877: 406). Greenwell (1877: 406-7) opened the cist to find a scattered cremation mixed with potsherds, “...of the ordinary character”, and a knife of honey-coloured flint (an exotic resource).

Barrow 186 was measured at 4.3 m in diameter and 0.45 m high (Greenwell 1877: 407). In its southeast, two cremation burials were found in pits on the old ground surface and a third cremation in the centre of the barrow on the old surface was that of an adult female in an urn.

62. Cheviot Quarry, Milfield, Northumberland

See section: Late Neolithic – Impressed Ware, #11.

63. Lanton Quarry, Milfield, Northumberland

See section: Late Neolithic – Impressed Ware, # 13.

64. Twizell, Northumberland

Whilst using a JCB to clear stone from a farm field, a whole Beaker pot was discovered in the spoilheap (Miket 1984: 245). It was kept by Lawrence Spours for awhile, but then taken to R. Miket for study. No other associations or contexts are known.

65. Fowbury (Fowberry), Chatton, Northumberland

Fowbury is an unpublished antiquarian site (Kinnes & Longworth 1985: 135). A bronze awl, a Food Vessel and the sherds of two Beakers were found here, but it is uncertain in what context and how (or if) they are associated with each other.

66. Smalesmouth, Chollerton, Northumberland

In a note in *British Barrows*, Greenwell (1877: 436) mentions a Beaker that was found in a cist with an inhumation.

67. Rosebrough, Northumberland

Two barrows (197 and 198), found in Doddington Parish, are described by Greenwell (1877: 415-417). In an undisturbed cist under a mound that was 7.6 m across and 0.9 m high, a cremation burial in an inverted Collared Urn of two adults was found (Greenwell 1877: 415-6). In a second cist set into the natural gravel, an inhumation with a Beaker was found almost covered by sand.

The second barrow at Roseburgh was found just over 1 ½ kilometres from the first (Greenwell 1877: 417). This measured 5.5 m in diameter and 0.9 m high. On the natural surface underneath, a Cinerary Urn was found sitting upright, covered by a slab of stone. Inside, the cremation of a young adult, 18-20 years old, was contained with three bone pins.

68. Lilburn Hill, Northumberland

Whilst ploughing in 1883, the capstone of a cist was found and removed. J. Moffatt was called and he excavated the grave (Moffatt 1885: 220-222). Inside was the cremated remains of seven individuals, at least one a woman and one a child, and under this were five pits, one of which contained the cremation of an adult. The capstone to the cist was carved with cup-and-ring designs but had broken whilst being removed. The beaker examined is not mentioned in Moffatt's report, but the acquisition date for the vessel is also 1885 and this is the only report from this locale for that year.

69. West Lilburn, Northumberland

In 1946, Mr. G. P. Hall found a cist when he lifted a stone that had been in the way of his plough for a long time (Collingwood 1946: 217). He began to dig within it, but when he found bones, he called the authorities. Collingwood (1946: 217-8) writes that the top of a Beaker and a jet button were visible on the surface of the fill, and upon excavation, a bronze

blade, a piece of worked flint and charcoal were found. In addition, two pieces of chalk were in the bottom of the grave (chalk is not locally found) along with the skeletal remains of an older female, aged 45 or more (Collingwood 1946: 229).

In 1954, a cist was found during ploughing by Mr. Robertson that contained burnt bone, charcoal and ceramic sherds of Food Vessel (Collingwood 1961: 373-4). The area of examination was then extended to determine if this represented the beginning of a cemetery. To the east, some 41 m away, a patch of burnt ground was discovered, and surrounding this, burnt hazelnut shells, charcoal, flints and ceramic sherds were recovered (Collingwood 1961: 374). The sherds were recorded to have represented a Beaker, a Food Vessel, an incense cup, and a Cinerary Urn (Jobey 1961: 377) and amongst the flints, a single barbed-and-tanged arrowhead, strengthen the contemporaneity of this area with the cist burial.

70. Ilderton, Northumberland

In a note of donation to the Museum of Antiquities in 1910, a Beaker is included from Ilderton (*PSA, third series, 4: 198*).

71. Seahouses, Northumberland

Whilst digging the foundations of a water reservoir in 1905, eight cists were found (Filby 1905-6: 121). The first contained the flexed inhumation of a man and a Beaker, which disintegrated as it was lifted. The second cist also contained an urn that broke as it was removed and a few bones, whilst the third cist had a more complete skeleton and a Food Vessel (Filby 1905-6: 123). Cists 4 and 5 were both empty and cist 6 was filled with earth, but also held the skeleton of a young adult and an urn. Cist 7 had a skeleton also, but his had been exhumed and reburied at some point. Finally, cist 8 held the flexed inhumation of an adult, accompanied by a Beaker (Filby 1905-6: 194-5).

72. Bamburgh, Northumberland

Greenwell records three barrows that he opened near Bamburgh in Northumberland (Greenwell 1877: 413). Of interest to this project is Barrow 193, a cairn on Rayheugh that measured 19 m in diameter and 3 m high. Inside, an inhumation accompanied by a Beaker

was uncovered. Within the cairn material a quartzite pebble showing signs of use and a possible quern were found (Greenwell 1877: 414). Near to this Major Luard-Selby is said to have opened many smaller cairns and found a Cinerary urn with a cremation and another unidentified pot; however, more detailed contextual evidence of these is not given.

73. Chatton Sandyford, Northumberland

Cairnfields are often found in Northumberland, but remain poorly understood because their purpose seems to have varied in the past from general clearance for farming to cairn cemeteries. One of these, at Chatton Sandyford on the River Till, 213 m OD, was explored in the 1960s by George Jobey. Of the two large cairns and some 150 small ones, one large and five small cairns were excavated (Figure 6.38a) (Jobey 1968: 5).

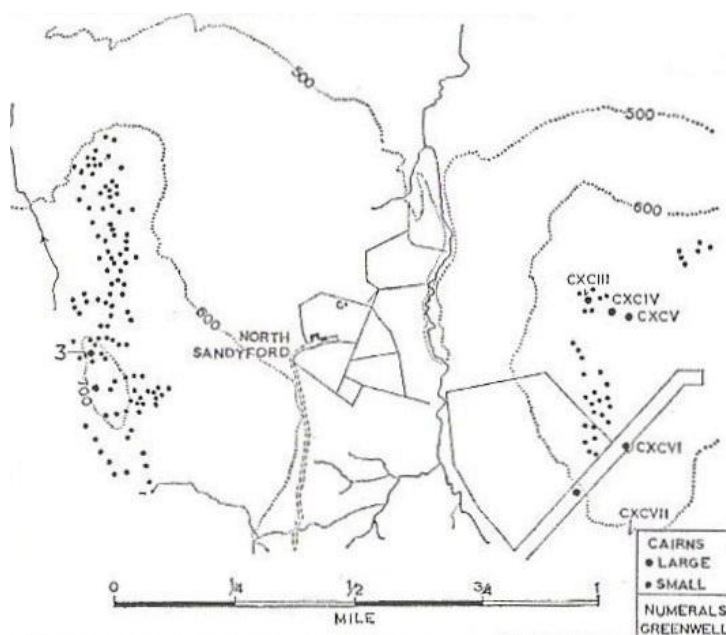


Figure 6.38a: Chatton Sandyford, site plan (from Jobey 1968)

The large cairn (Figure 6.39a) was a kerbed cairn that, despite Roman disturbance in the upper layers, yielded five burials. Burial one consisted of an inhumation in an oval pit with the crushed remains of a Beaker

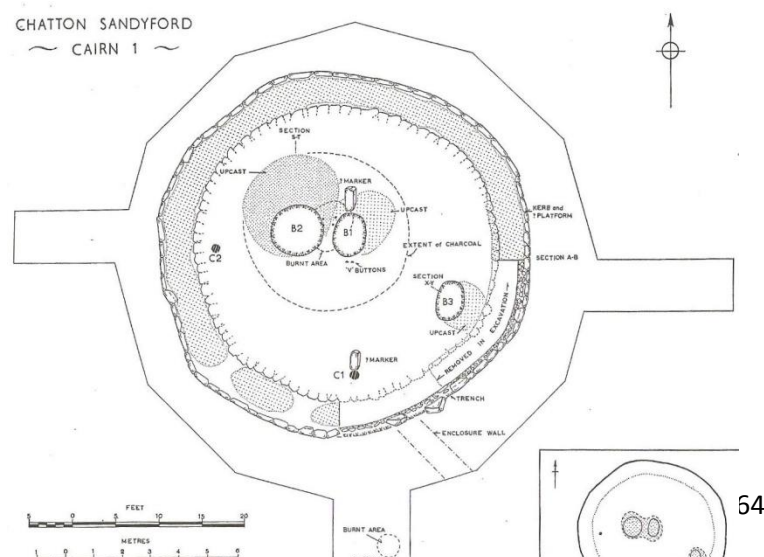


Figure 6.39a: Chatton Sandyford, plan of large cairn (from Jobey 1968, 8)

and two V-bored jet buttons (Jobey 1968: 13-4). Beside this was burial two, which had been robbed, but still contained a broken Beaker at the bottom (Jobey 1968: 15). Charcoal was found to the north, as well as under, both these graves and to the west of them, four upright stakes burnt *in situ* lay in a patch of burnt ground (Jobey 1968: 14). Jobey suggests this may have been a cremation pyre and was able to obtain a radiocarbon date of 1670 ± 50 BC from the charcoal in the stakeholes (Jobey 1968: 15). The third burial, located away from the first two in the southeast of the cairn, contained a mixed fill of Beaker sherds from the same vessel (Jobey 1968: 17). The base of the pit was paved with a large stone of the same type as the kerb around the cairn, so it is thought that this burial occurred at the same time as the construction of the kerb. Two cremations were also discovered in the upper parts of the cairn – one in a Vase Urn (Jobey 1968: 18). The other was found in a pocket in the cairn fill as a deposit of charcoal and burnt bone, possibly placed in, “...a bag of some perishable material” (Jobey 1968: 18).

The five smaller cairns are all listed by their proximity to the large cairn here described. Of these, cairn A, showed only burning on its western part (Jobey 1968: 34). Cairn B, located 26 m from the large cairn, had charcoal flecks on the old ground surface underneath the stone fill and a sherd of Food Vessel or urn within it (Jobey 1968: 37). Cairn C, 23 m from the large cairn, consisted of two mounds with charcoal flecks and a flint scatter underneath, whilst Cairn D, 13 m from the large cairn, was found to be natural. Finally, under Cairn E, the closest to the large cairn at 5 m away, a pit, filled with charcoal and the cairn material as backfill, yielded a radiocarbon date of 2890 ± 90 BC (Jobey 1968: 40). Both of the dates obtained at this site, however, must be treated with some caution as the type of charcoal was not mentioned for either.

74. Rock, Ellsnook Wood, Northumberland

On a low ridge a mound, covered with trees, drew the attention of R. C. Bosanquet in 1921 and an excavation was done to explore it (Bosanquet 1933: 147). Under the mound was a cist that held a Beaker and was half-filled with sand (Bosanquet 1933: 148).

75. Ratcheugh, Alnwick, Northumberland

Kinnes & Longworth (1985: 138) record the vessels from this antiquarian find. The remains include a Beaker and two Food Vessels, although their context and relationships are unknown.

76. High Knowes, (Alnham), Northumberland

See section: Early/Middle Bronze Age – Collared Urns, #62.

77. Shipley, Alnwick, Northumberland

During the ploughing of a field on Shipley Farm in 1958, a cist was hit by the plough, disturbing its capstone. Inside lay the flexed skeleton of a female in her 30s, a Beaker near her head, and two pieces of red ochre (Jobey 1960: 246). On her left humerus was a deep cutmark, which may have caused her death.

78. High Buston, Northumberland

Workmen were laying water pipes in 1912 when they came upon a cist (Burman 1913: 44). Inside, the remains of two adult males, one older and one younger, were found with a Beaker and a sharp flint tool. Burman (1913: 45) notes that the closest known Beaker burial to this site is at Hilly Law, Low Buston, found in 1815.

79. Hawkshill, Lesbury, Northumberland

In 1850, Tate opened five cists on Hawkshill, near Lesbury (Tate 1851: 63). It is a commanding point with the Cheviots as a backdrop and expansive views of the Aln Valley and Alnmouth Bay. The first cist held only a vessel in a water-soaked floor, as did the second cist, and the third cist was empty (Tate 1851: 64). Cist 4 had badly decomposed human ribs and was partly joined to cist 5, which was empty.

80. North Hazelrigg, Northumberland

In 1973, whilst ploughing, Mr. W. Waugh discovered a cist. Inside were the remains of Beaker pottery, which he collected before covering the cist with ploughsoil (Jobey 1975: 217). He reports that two of the Beakers were found in either corner of the southeast end of the cist, but the provenance of the third miniature Beaker is unknown (Jobey 1975: 218). No skeletal remains were found, but Jobey (1975: 218) notes that the soils in this location are very acidic, which would cause uncremated bone to decompose.

81. Amble, Northumberland

Following a strong storm, an upright stone, standing about a foot high, was noticed, and upon inspection, a stone cist discovered (Dunn 1859: 36). The flexed burial of an individual was found inside along with a Beaker at its side. The Beaker is said to have, "...contained a small quantity of dark earth" (Dunn 1859: 36). It is uncertain, but questioned if this indicates the presence of a residue.

82. Horton Castle, Northumberland

The acquisition number dates the donation of this Beaker to 1830. No record of its context could be found in the literature.

83. Dilston Park, Northumberland

Near the ruins of the northwest tower of Dilston Hall, on the Devil's Water near where it meets the Tyne, a cist was discovered in 1830 when the road was broken up (Gibson 1906: 132). It is not mentioned if anything was recovered from this cist. Sometime later, in 1905, three Beakers were found in another cist that was hit by the plough. No associated artefacts were observed, except for burnt bone, teeth and charcoal, which suggests a cremation burial accompanied these Beakers (Gibson 1906: 134). A second cist was found two yards away during the same excavation which held two Beakers and cremated remains (Gibson 1906: 140-2). Although it is unusual for Beakers to be found with cremations, rather than inhumations, it is not entirely unheard of in Northumberland.

84. West Wharmley, Hexham, Northumberland

In 1928, a stone that had been stopping the plough for some time was removed at West Wharmley farm and a cist was revealed (*PSA*, 4(3): 187-9). Inside lay a skeleton and a Beaker, both of which were thrown out by the workmen and were mostly destroyed. The fragments that could be salvaged were analysed and it was determined that this was the grave of an adult, aged 25-30 years.

85. Altonside, Haydon Bridge, Northumberland

A note in the Annual Reports of Council of the Society of Antiquities of Newcastle (1979) included this Beaker that was donated by Mr. Robson.

86. Plenmellor Common, Haltwhistle, Northumberland

No context for this Beaker could be found in the literature.

87. The Sneep, North Tynedale, Tyne & Wear

On a sand hill at the edge of Tarret Burn, erosion revealed a cist (Hedley 1892: 49). This was noticed by the landowner, Mr. Lynn, who sent for Mr. Charlton at the Museum of Antiquities. Inside, the inhumation of a female lay on its right side with a Beaker behind her shoulders. The pot had tipped over and lay on its side. Seven flints were also recovered, two of these recorded as endscrapers (Hedley 1892: 50).

Late Neolithic/Early Bronze Age – Food Vessels (Map 6.4)

1. Hedderwick, (Dunbar), East Lothian

See section: Late Neolithic – Impressed Ware, #1.

2. Luffness, (Longniddry), East Lothian

This Food Vessel was found by John Purves in 1880 at a quarry near Gullane (Hardy 1885: 306).

3. Winton Park, Cockenzie, East Lothian

During housing development, a drainage ditch was dug that exposed a cist (Callander 1932: 403). Inside, a Food Vessel lay in the southeast corner and the cremated remains of an individual was scattered across the floor.

4. Costerton Mains Farm, (Blackshiels), Midlothian

A note of donation in PSAS 69 (1934) includes this Food Vessel and states it was found in a cist on the farm. It is also described by Alison Young in 1950-1 (*PSAS*).

5. Bonnyrigg, Dobbie's Knowe, (Lasswade), Midlothian

Whilst making a hole for a flagpole in 1937, a Food Vessel was found buried six feet below the surface (*PSAS 1938 donations: 134*). It was donated to the museum in 1938.

6. Parkburn Sandpit, Midlothian

In the mid-1950s, a Roman and Medieval long cist cemetery was excavated over a series of field seasons (Henshall 1964-6: 204). It was in the 1962 season, however, that a short cist was uncovered. Ian Longworth was called to investigate, but found inside only a Food Vessel (Henshall 1964-6: 209). The pot lay on its side and a light-coloured stain on the floor of the cist extended from in front of its mouth for 5 cm to a depth of 40 cm. The slab of stone, forming the wall behind the vessel, is also of note as it was engraved with concentric circles.

7. Fairmilehead, (Edinburgh), Midlothian

On a knoll, 167m OD, two cists were found whilst digging the foundations for new houses in 1972 (Close-Brooks 1972-4: 281). Cist 1 held the inhumations of two individuals and

although cist 2 was destroyed before archaeologists arrived, the police were able to salvage the bones of an adult. No pots were found in these graves.

Canmore lists several graves found here in cists and with urns that were found through the 19th and 20th centuries.

8. Merchiston Cemetery, (Edinburgh), Midlothian

In 1902, a cist was found in the cemetery by workmen who were digging a grave (Dennison 1906: 313). It contained only a Food Vessel that stood upright in the corner of the cist.

9. North Gyle, (Edinburgh), Midlothian

A cist was discovered whilst sand was being collected for a building at North Gyle farm (Callander 1929: 368). It was empty, except for a Food Vessel that sat in one corner of the cist.

10. Juniper Green, (Edinburgh), Midlothian

In 1898, Dr. Anderson read in the newspaper that urns and a cist had been found at Juniper Green (Coles 1898-9: 354). Workmen digging the foundation for a building had found a Food Vessel, which they accidentally smashed in the process (Coles 1898-9: 355). Just 2 m to the north of this, a Collared Urn was found in the same way and then to the east of this find, a cist was uncovered, which, although containing a cremation without a pot, lay just beside a second Food Vessel burial. These were then donated to the museum in Edinburgh.

11. Bridgeness, Bo'ness, West Lothian

On a small plateau, 40-50 feet OD, a shell mound was the site of two cist burials that contained Food Vessels (Callander 1924: 287). An empty cist and an inhumation without a cist were also found within. Callander also mentions an inhumation with a Food Vessel that was found 300 yards to the west of Bridgeness at Cowdenhill.

12. Cairnpapple, (Torphichen), West Lothian

See section: Late Neolithic/Early Bronze Age – Beaker, #23.

13. Cadder, Bishopbriggs, Lanarkshire

In 1927, a Food Vessel was purchased by James Cree from Sir Arthur Mitchell. Inside, there still remained a cremation, but a letter from Rev. J. B. S. Watt had been added (Cree 1927-8: 230). This read that the pot had been brought to him in 1884 by some workmen who had found it whilst digging a sandpit. Upon inspection of the site, Watt determined it had been a cairn with a diameter of about 9 m (Cree 1927-8: 231). The workmen told Watt that there had originally been four pots, two large and two small, but one was smashed and the other two lost. The remaining Food Vessel is one of the larger two.

In that same year, whilst digging a sandpit on the Cawder Estate, a Collared Urn fell out of the wall of the pit and rolled to the feet of the workmen (Bryden 1926-7: 266). It had been inverted over a cremation, but only a few bone fragments were recovered. It seems that the pot had been buried under a cairn on a ridge in the field.

14. Ferniegair, Hamilton, Lanarkshire

In 1936, workmen were digging near Deer Park Sand Quarry when they uncovered a cist (Miller 1947: 17). The site was at an upland location with a good view of the Avon and Clyde rivers on a moraine. Inside the cist, an inhumation of a young female (probably a teenager) lay on her right side with a flint knife by her head (Miller 1947: 18-19). The body had been covered by a cloth or shroud of moss, *Polytrichum Commune*.

Upon excavation a month later, a second cist was found that held the inhumed remains of a male, accompanied by a Food Vessel (Miller 1947: 19). Two other urn graves were found, one inverted and the other upright and a rectangular fellstone wristguard was associated with them (Miller 1947: 20). Another pot was also found nearby without any associated artefacts and is described as different than the others as it had a “tall, slender shape”, but this later decomposed and was not kept (Miller 1947: 20). It was later determined that all of these graves had been covered by a very low mound (Miller 1947: 21).

15. Drumshargard, Cambuslang, Lanarkshire

A note of purchase for the museum (1882) lists two ‘sepulchral urns’ – a cinerary urn and a Food Vessel found near Dremshargard.

16. Patrickholm Sandpit, Larkhall, Lanarkshire

When the Patrickholm Quarry was opened in 1947, four Bronze Age burials were found almost immediately (Maxwell 1948-9: 207). The first was a cist that held the inhumation of an adult accompanied by a Food Vessel, whilst the second contained cremated remains in a simple pit without grave goods (Maxwell 1948-9: 209). The third was a small cist that was full of cremated bones from four people: an older adult, a younger adult female and two children, aged 7-12. The fourth site was marked by a stone cist that contained an inhumation and a cremation with a Food Vessel (Maxwell 1948-9: 211-212).

17. Hero’s Cairn, Lanarkshire

Seven kilometres from Lanark, a group of 26 barrows and cairns sits on Swaites Hill at 300 m OD, overlooking the River Clyde and the villages of Pettinain and Thankerton (Stevenson 1975-6: 299). It was here, in preparation of the *Inventory* that the southernmost of these cairns was excavated to explore an exposed cist. The centre had been robbed to the extent that the monument existed as almost a kerbed rubble ring. However, in a very shallow pit in the centre lay the cist. Whoever had exposed this cairn, though, had emptied the cist and so only a few sherds of a Food Vessel were found along with some pieces of cremated bone.

18. Sherifflats, (Thankerton), Lanarkshire

The provenance of these vessels could not be found in the literature or on the Canmore website.

19. Cairny, Lanarkshire

See section: Late Neolithic/Early Bronze Age – Beaker, #28.

20. Cloburn Quarry, (Cairngryffe), Lanarkshire

See section: Late Neolithic/Early Bronze Age – Beaker, #34.

21. West Water Reservoir, (West Linton), Peeblesshire

See section: Late Neolithic/Early Bronze Age – Beaker, #36.

22. Darn Hall, Peeblesshire

On the crest of a ridge that overlooks the Tweed river and surrounding valleys, a cist was found when a plough hit its capstone (Callander 1930: 25). Inside was only a Food Vessel. Callander also mentions a Food Vessel found at Darn Hall around 1872 in a sand pit that was donated to the museum at that time by Lord Elibank. These vessels are now catalogued as EE120 and EE7, respectively.

23. Ancrum Moor, Peeblesshire

The vessel examined from Ancrum Moor could not be located in the literature.

24. Redden Farm, (Sprouston), Roxburghshire

A cist was found whilst ploughing in 1949 on the summit of rising ground (Feachem 1948-9: 222). The inhumed remains of a young adult male were inside, accompanied by a Food Vessel and a flint blade.

25. Yetholm, (Kelso), Roxburghshire

A Food Vessel from Yetholm was examined for this research, but no record of its context could be found.

26. Morebattle, Otterburn, Roxburghshire

Whilst quarrying rubble to infill a ditch, a cairn was found on a prominent overlook of the Tweed in which there was a cist (Douglas 1842-9: 74). Inside lay the flexed inhumation of a child, aged 6-7 years old, and a Food Vessel.

27. Kalemouth Cairn, Roxburghshire

In 1932, a hoard of socketed bronze axes was found in a cairn on the property of Kalemouth House on a forested bank sitting 9 m above the Kale Water and overlooking its convergence with the Teviot (Richardson & Lindsay 1951-2: 200). The cairn was subsequently excavated in the same year. It had been severely robbed, but a cist still lay off-centre at its base. It contained a Food Vessel. In the southeast portion of the cairn, a second cist was found empty. About a meter from the hoard of axes, near the top the cairn, a carved stone with lines forming a star shape was found.

28. Sunlaws, Roxburghshire

In December 1977, a cist was found 580 m from Sunlaws and reported to RCHAMS (Ritchie 1978-80: 506). It was found to be empty. However, in 1873, three other cists were dug 600 m WNW of this cist, two of which contained inhumations and a Food Vessel rim (interestingly, this is described as a base and wall of a Food Vessel in the initial report). One of these inhumations was of sufficient preservation to determine it had been the body of an adult who died aged 25-30 years old.

29. Camphouse Farm, (Edgerston), Roxburghshire

See section: Late Neolithic/Early Bronze Age – Beaker, #40.

30. Roxburghshire?

Sherds from a Food Vessel urn from an unknown provenance in Roxburghshire were examined for this doctoral research. No record of them could be found in the literature.

31. Heiton Mill, (Kelso), Roxburghshire

Whilst ploughing in 1932, a cist was struck. Inside were the inhumed remains of a person and a Food Vessel (Canmore website, retrieved 22/02/12).

32. Longcroft, Lauderdale, Berwickshire

On a knoll in a farm field that had been a quarry some time previously, an inverted urn was exposed and local children kicked at its base until it broke (Lynn 1902: 32). Inside, the charred remains of human bones were revealed. Provost Turnbull, Dr. Routledge, Melrose and Francis Lynn were called to investigate immediately. They excavated the area to find that the urn was sitting on a flat stone in a cist, and nearby, a second cremation lay in a pit (Lynn 1902: 34). A second cist was also found just beyond that contained a Food Vessel and a dark 'mould'.

33. Edington Mill, (Chirnside), Berwickshire

Whilst widening a road, a cist was found in 1913 (Craw 1914: 330). What are thought to be the remains of a cairn was found around the cist. Inside were the remains of a Food Vessels and sherds from a Beaker (Craw 1914: 332).

34. Hagg Wood, (Foulden), Berwickshire

On a prominent knoll, two cairns were opened by Craw in 1913 (Craw 1914: 316). The first cairn was enlarged twice after its initial construction and there were three concentric circles of stones marking these enlargements. In its earliest phase, cairn 1 held four cist burials, two of which lay side by side, touching along one wall. Both of these held Food Vessels only (Craw 1914: 319). Two other cists were placed as secondary burials and were at higher levels than the first two and were robbed by the time Craw examined them; however, there was evidence that the ring of stones was moved slightly to accommodate the more southerly of these cists, which led Craw (1914: 320) to believe that they were placed with the knowledge of the others.

Within the second phase of the cairn, there was a pit that had a fill of ‘forced soil’, charcoal and a badly-preserved human bone. Craw mentions that pits such as these are common under mounds elsewhere in Britain, but it was the only one known from Northumberland at this time (Craw 1914: 320). Finally, at some point after this pit was dug, the entire cairn was enlarged once more and completely covered with stone rubble.

The second cairn that Craw excavated at this location was smaller and had a single, central cist that was empty (Craw 1914: 326-7).

35. Earnsheugh, Coldingham, Berwickshire

In the list of donations to the Museum of Scotland in 1894 (*PSAS*) a plain Food Vessel is listed as having been found in a cist at this location.

36. High Cocklaw, Berwickshire

In a cist, a crudely-made Food Vessel was found with two flints and many jet beads (Callander 1929: 370). They were later given to the museum, although many of the beads had been given away. A flint knife was also found on this farm, as were several other cists.

37. Cadger’s Cairn, Gordon Moss, Berwickshire

See section: Late Neolithic/Early Bronze Age – Beaker, #49.

38. Hoprig, (Cockburnspath), Berwickshire

See section: Late Neolithic/Early Bronze Age – Beaker, #51.

39. Todwell House, Hallyburton Farm, Berwickshire

In 1880, Lady Scott of Spottiswoode dug what she thought to be a cairn at the Hallyburton Farm in Berwickshire (Scott 1880-1: 78). In the centre of the cairn, lying on a flat slab of

stone were the remains of a cremation burial with a Food Vessel. The pot was reconstructed and donated to the National Museum of Scotland in 1920 (PSAS 55: 21-22).

40. Lauder, Hillhouse, Berwickshire

In a note of a loan made to the National Museum of Scotland (Black 1893-4), the body sherd of a Food Vessel is included.

41. Yarrow Kirk, Selkirkshire

A short note of donation describes a, "...broken, coarse clay Urn" (PSAS, 1854-7) found in a stone cist, along with a black stone pendant. The association of the black stone pendant could refer to the jet ornaments so often found with Beakers and Food Vessels.

42. Murton High Crag, (Murton Farm), Northumberland

In 1972, aerial photographs by St. Joseph revealed two sites on a precipice, some 90 m OD, at Murton High Crag (Jobey et al. 1987: 151-2). These consisted of two enclosures, the larger a semi-circle truncated by the edge of the cliff, and the smaller a full circle with three openings. Initially, it was supposed that these were henges or hengiform monuments and most likely Neolithic or Early Bronze Age in date, but to be certain a large-scale excavation was planned by Jobey & Jobey (Figure 6.40a).

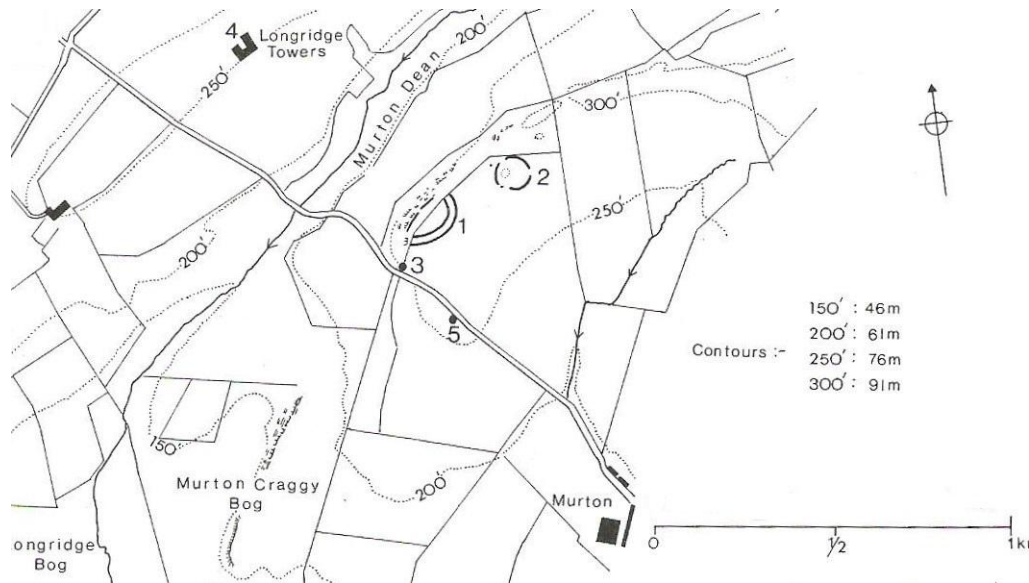
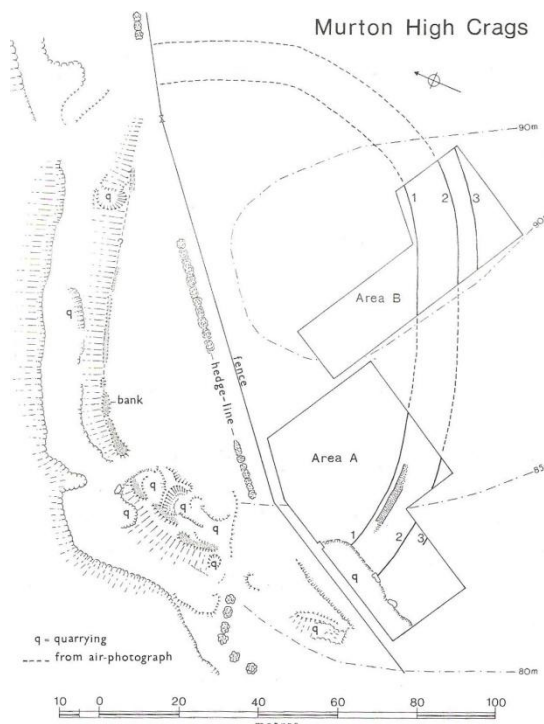


Figure 6.40a: Murton High Crag, site plan (from Jobey & Jobey 1987, 152)

Site 1, the semi-circle, was excavated in two parts (Figure 6.41a). Both were found to have been extensively ploughed, which had destroyed the provenance of some artefacts – in



particular, in Area A, part of a pygmy cup, some flint pieces and a perforated whetstone may indicate a Bronze Age burial, although its unstratified nature makes it impossible to confirm this (Jobey et al. 1987: 157). The exploration of Areas A and B in enclosure 1 revealed that this was not a henge, but an unenclosed, and subsequently enclosed, platform settlement that had been occupied for a significant amount of time.

Figure 6.41a: Murton High Crag, plan of site 1 (from Jobey & Jobey 1987, 156)

The only remains of the first phase of settlement were two unenclosed houses located directly outside the perimeter of the enclosure (Figure 6.42a). Although no secure dates could be

obtained from these, they were typical in form to those known elsewhere that have dated to the Early Bronze Age.

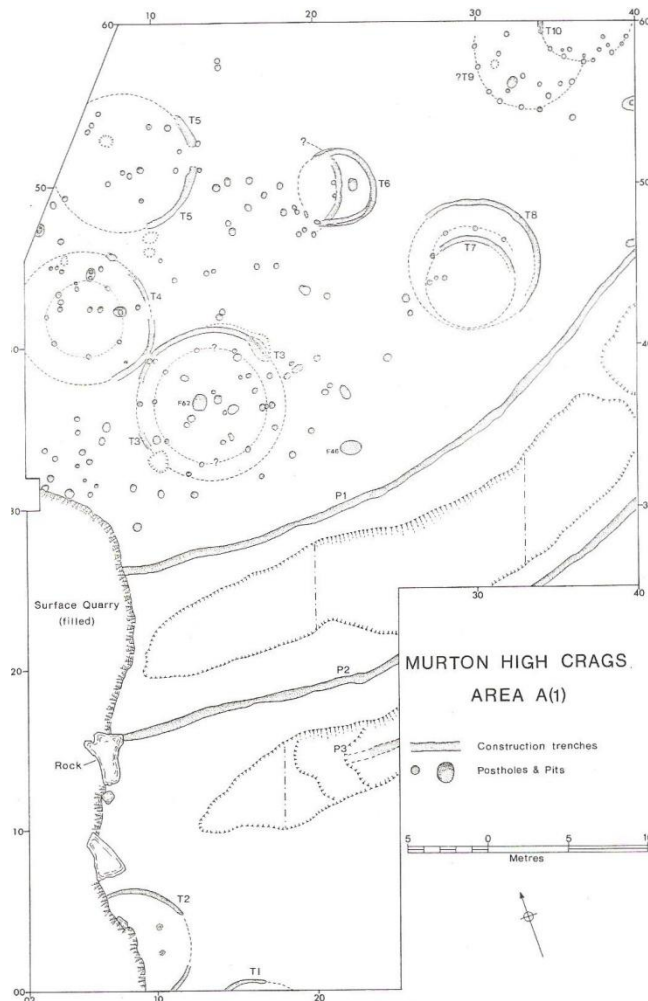


Figure 6.42a: Murton High Crags, plan of unenclosed structures (from Jobey & Jobey 1987, 158)

Eleven further houses were found at this site enclosed by a series of perimeters – first, three successive timber palisades and finally, a stone wall (Jobey et al. 1987: 161). These houses were consistent in layout, with porches to the south or southeast and many with typical central, rectangular hearths, and fell into two size groups: the smaller measuring 5.5-6 m in diameter and the larger 7.5-9 m. The continuation of use at this site from the first Early Bronze Age houses is supported by their consecutive perimeters and a date from a burnt patch under the first of these. Although

uncalibrated, it forms *terminus post quem* of 1010 ± 80 BC for the first

perimeter (Jobey et al. 1987: 163). Moreover, the final stone wall contained in its make-up sherds of Roman pottery and a rotary quern, which suggests use of the site well into the Iron Age (Jobey et al. 1987: 170). It is the unfortunate lack of solid radiocarbon dates, particularly in the earlier phases that hinders the full comprehension of the site and Jobey & Jobey were not able to excavate the second enclosure at Murton, thus future exploration of this site may give greater insight into its chronology.

Finds of ‘urns’ around Murton is also reported in the *Berwickshire Naturalists’ Club* (vol. 1, p.54), although the whereabouts of these urns now are unknown.

43. Cornhill, Northumberland

A Food Vessel was examined that was labelled Cornhill with an acquisition number dating to 1929; however, a publication was not found in the literature to ascertain its provenance.

44. Ford, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #61.

45. Doddington, Northumberland

In 1867, a cist was found on a knoll (Greenwell 1877: 411). This site, recorded by Greenwell as Barrow 189, contained the inhumation of an adult male, aged 24-30, accompanied by a Food Vessel, a flint flake and a knife. Greenwell states that the remains of leather clothing was also found in the grave.

46. Kylloe, Northumberland

Whilst preparing a part of the quarry for detonation, a cist burial was found in 1927. It was opened by Colonel G. F. T. Leather, who also took photos of it (Brewis 1928: 26). Inside, was a Food Vessel, a piece of charcoal and a jet necklace; no indication of human remains is made in the report. Interesting to note is that of the 1000+ burials of this kind found in Yorkshire by Canon Greenwell, only eight of them contained jet, whilst in Scotland, 40 were found in association – compelling since jet is most prevalently found in Whitby, Yorkshire (Brewis 1928: 29). This may suggest that it held more value as an exotic material in Scotland or it may simply provide insight into the aesthetics of the Bronze Age people who lived in this area.

A note of acquisition in the Museum of Antiquities also lists four Neolithic polished stone axes, two Bronze Age urns (in sherds), and five whetstones donated by Captain C. D. Leyland. Tait (1968: 277) suggests that these were artefacts collected during the quarrying of the site over several years. He states that one of the urn sherds is part of a Collared Urn, whilst several others join to form the round bottom of a pot that is decorated on and inside the

rim. No indication of this pot's tradition is given, but it seems to fit Impressed Ware most easily from the description.

47. Dour Hill, Northumberland

In preparation of land clearance and tree planting in 1975, a cist was found at 355 m OD on Dour Hill (Jobey 1977: 204). Inside, covered only by 20 cm of sandy silt, was an inhumation, and a rim sherd of a Food Vessel. Amidst the silt, a further Food Vessel was found in the southwest corner of the cist along with some teeth (Jobey 1977: 206). The remains were determined to be those of two children, aged 6-9 months and 11 years (Jobey 1977: 207).

48. Cheviot Walk Wood, Eglingham, Northumberland

On the crest of Beanley Ridge is a moraine at 143 m OD (Stopford et al. 1985: 117). This had been cut into by antiquarians before 1857 and a burial (burial 1) was found by Wilson, which was emptied. In 1984, the site was excavated again by Stopford et al. and a further six burials were uncovered. Burial 2 was the find that caused the excavation to be undertaken (Stopford et al. 1985: 119). It contained the cremation of a young adult and a Food Vessel. Burial 3 was an unenclosed cremation of a person aged 20 years or older and was accompanied by a flint flake, whilst burial 4 contained a Food Vessel and the cremated remains of an adult, 30-40 years old, and a child aged 3-6 years (Stopford et al. 1985: 121-2). Outside of this cist were the cremated remains of a further individual. Burial 5 was a cist containing the cremation of a young adult with an infant, flints and a knife, and burial 6 was the cremation of a young child, 2-3 years old with Food Vessel and a barbed-and-tanged knife (Stopford et al. 1985: 122-123). Finally, burial 7 was an unenclosed deposit of the cremated remains of a middle aged adult, accompanied by a Food Vessel (Stopford et al. 1985: 124).

49. Blawearie, Eglingham, Northumberland

In a stone circle, 11 m in diameter, a cist was found before Greenwell's investigation of the area (Greenwell 1877: 418). This is said to have contained an urn, now lost. However, upon his exploration of the monument, three more cists were uncovered and are recorded as Barrow 200. The first was found in the southwest of the circle. It had sand in the bottom and a Food Vessel and charcoal to one side (Greenwell 1877: 418). The second cist was found 0.9

m west of the first and held a jet and shale necklace of more than a hundred beads, and a flint knife. The third cist was in the northwest of the circle and was empty except for some sand and charcoal.

50. Haugh Head, Wooler, Northumberland

In the 1940s, a cist was discovered on a knoll by Mr. P. Robson (Collingwood & Cowen 1948: 47). When the lid was lifted, the area inside was found to be filled with a light sandy soil, unlike the surrounding earth, and a Food Vessel. The pot was filled with the same sandy soil, charcoal, two bone fragments, a flint spearhead, and a piece of exotic flint (Collingwood & Cowen 1948: 54). The contents of the pot were sieved to ensure the recovery of all finds.

51. Hawkshill, Lesbury, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #79.

52. West Lilburn, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #69.

53. Rothbury, Northumberland

From a mound at Great Tosson, four cists were found dug into the limestone rock (Greenwell 1877: 431). No overlying barrow was recorded. In the first cist, the remains of a woman with jet button and a Food Vessel were uncovered, whilst the second inhumation was accompanied by a jet button, a Food Vessel and a deer bone tool. The third and fourth cists also contained inhumations by themselves (Greenwell 1877: 432).

Greenwell (1877: 433) also mentions that he obtained a Beaker from Old Rothbury.

54. Spindlestone, Northumberland

The base and rim sherds of a Food Vessel (or Food Vessels) were not published by Greenwell, but Kinnes & Longworth (1985: 138) record them as UN42. No context or associations are known.

55. Wooler, Northumberland

In June 1872, a cist was opened by Whightman that held the inhumed remains of a flexed male. Beside him was a Food Vessel and two V-shaped jet buttons (Kinnes & Longworth 1985: 139).

56. Simonside Hills, Rothbury, Northumberland

After the urn burial found at Great Tosson, Dixon (1892) dug several of the known mounds on the Simonside Hills. Most of the mounds were found on Spital Hill, which has three prominent ridges at elevations at: 700-800 ft OD, 800-900 ft OD and 900-1000 ft OD (Dixon 1892: 24). The first cairn, in the middle ridge, measured 20 ft in diameter and 3 ft high (Dixon 1892: 25). In the centre of this and cut into the natural soil, a cist was uncovered that contained a Cinerary Urn encircled by stones. As the pot was lifted from the cist, it broke beyond repair, but the cremation was retrieved for analysis.

The second cist was located 200 yards to the west of the first on the same ridge. Dixon (1892: 25) states that it was a large cairn, but does not give the exact measurements of it; however, in the central cist, the inhumation of an adult male, aged 25-40 years, lay on its left side. A hole in the side of the skull explains his cause of death (Dixon 1892: 26).

The third and fourth cairns, on the 700-800 ft contour, were small and each housed a central cist. Although the former was empty, the latter contained a fragment of bone (Dixon 1892: 26).

On the 900-1000 ft ridge, the fifth and sixth cairns were excavated (Dixon 1892: 27). Only two poorly preserved fragments of two Food Vessels and the cremated remains of a person were found in the fifth, whilst the sixth cairn had a more substantial cist that held an inhumation.

The seventh cairn to be dug by Dixon in this exploration proved to be much more profitable than the previous ones described. Only 120 yards from Willie's Cairn at the top of Spital Hill, this cairn measured 26 ft in diameter and 6 ft high. A central cist was cut into the natural by 2 ft, but held only sand. The second cist held cremated remains and showed evidence of *in situ* burning (Dixon 1892: 28). Also under this cairn was a large Cinerary Urn that was found inverted over a cremation on a flat stone that lay on the old ground surface. A flint knife and the sherds of a separate vessel were found in this pot as well. Adjacent to this a further smaller cinerary urn and two Food Vessels were found.

At the "neck of Simonside" on the 900-1000 ft contour near a large rock, called "Little Church", the eighth cairn was found (Dixon 1892: 29). An empty cist in the centre and a possible partial cist were the only internal features.

The final two cairns recorded by Dixon were found at Ravensheugh. The first, located 1300 ft OD, was a very large cairn that measured 53 ft X 40 ft in diameter (Dixon 1892: 30). It yielded no finds. Just 300 ft below this, another cairn lay on a knoll on the ridge. It was 27 ft X 30 ft in diameter and 10 ft high. A cist in the southeast portion of this monument that was particularly large held only sand, but Dixon (1892: 30) notes that the floor paving slab of this cist had cupmarks carved on it.

57. Harehope Hill, Eglingham, Northumberland

Barrow 201 is recorded as a cairn that was 6 m in diameter and encircled by stones at its base (Greenwell 1877: 421). A cist in the centre was set in to the natural surface and a flint knife and a sherd were found therein.

58. Roddam, Northumberland

Around 1850, a Food Vessel was found in a mound near Roddam Hall. It was donated to the Museum of Antiquities in 1907 (*PSA, third series, 3: 92*).

59. Chatton Sandyford, Northumberland

See section – Late Neolithic/Early Bronze Age – Beaker, #73.

60. Howick Heugh, Northumberland

On a low ridge, near the edge of a quarry, archaeological material from the Mesolithic to the

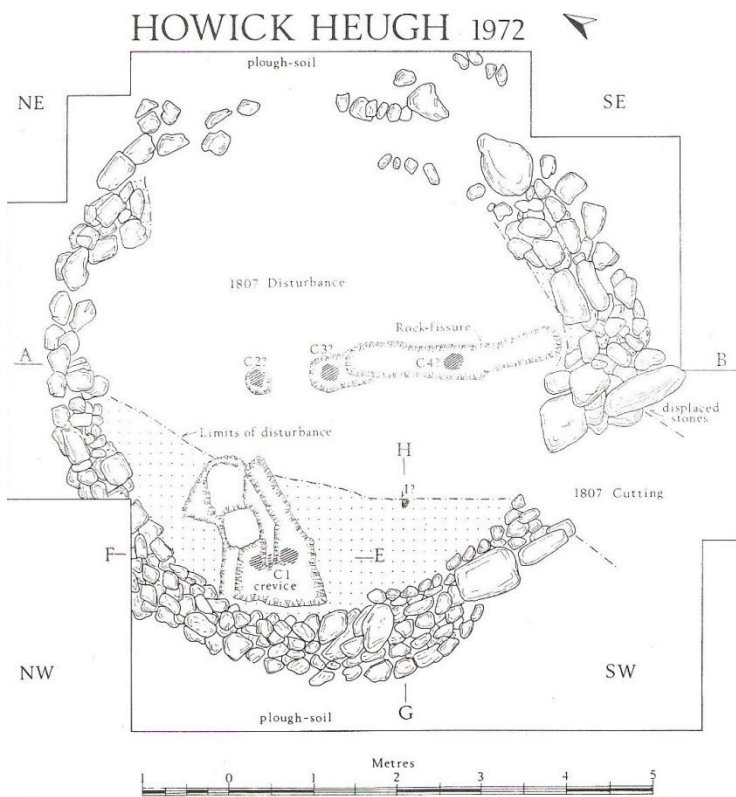


Figure 6.43a: Howick Heugh, plan of cairn (from Jobey & Newman 1975, 5)

historical period has been found at various investigations since the early 19th century (Jobey & Newman 1975; also see Waddington et al. 2003, 2005).

Jobey & Newman's excavation focused on a Bronze Age cairn and was done to save the site from destruction in 1972 (Figure 6.43a).

It was a low mound, 8 m in diameter and only 1 m high (Jobey & Newman 1975: 4). A pit dug into the centre contained a coin from 1807, which suggests it had seen

antiquarian disturbance in the past (although this has gone unrecorded)

(Jobey & Newman 1975: 6). As a consequence, only the initial burials on the old ground surface remained untouched.

On the bedrock under the cairn, an urned cremation of a woman and child was discovered, accompanied by a whetstone and a broken Collared Urn (Jobey & Newman 1975: 10-13). Nineteen sherds of a separate vessel and of a pygmy cup were also with this cremation. Near to this lay cremated remains that Jobey & Newman (1975: 12-14) believe represent three other deposits; a flint flake was associated with the middle of these. In the cairn fill, sherds from three other vessels (thought also to be Bronze Age) were uncovered (Jobey & Newman 1975: 12).

Cist burials are also known in this area. MacLaughlan (1867: 6-7) records several cists that were dug in 1836, "...about 250 yards southeast of the camp [hillfort]" - about 500 m from Howick Heugh (Waddington et al. 2005: 71). He reports that one of these contained an inhumation of "a large, strong person", who was accompanied by a Food Vessel in a cist whose cover was decorated with rock art carvings (MacLaughlan 1867: 7).

In addition, in 2002, during the excavation of the Mesolithic hut found at Howick, a flat cist

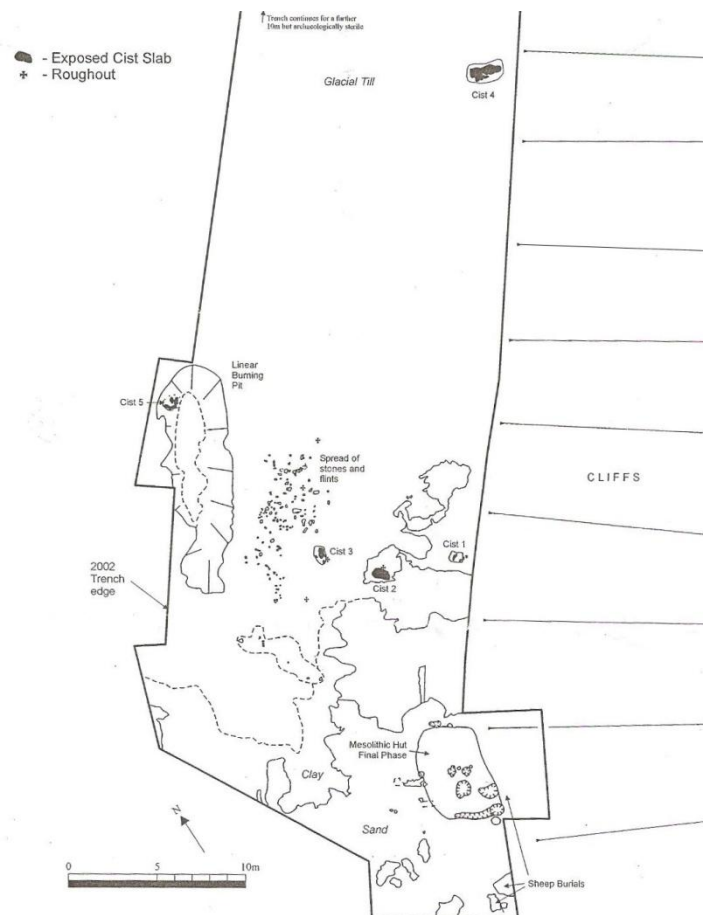


Figure 6.44a: Howick Bronze Age cemetery plan (from Waddington et al. 2003: 4).

infants.

The linear feature measured 11.5 m long and 3.7 m wide and contained charcoal, burnt stones, burnt flint and scorching on the surrounding sand (Waddington et al. 2005: 71). The end of this feature abutted Cist 5, which also showed scorching on its sandstone slabs. Waddington et al. (2005: 71), therefore, believe that this feature was constructed much later than the cist cemetery, especially since it interfered with Cist 5.

cemetery was also uncovered (Figure 6.44a) (Waddington et al. 2003).

Within the 1120 m² area that was fully excavated, five cists were found, along with a linear feature. Of all of these, only cist 2 held a few small skull fragments, which suggests that the cists had held inhumation burials since cremations would have survived the highly acidic soils of the site (Waddington et al. 2005: 73). Cist 2 also held a few fragments of a ceramic vessel and a Food Vessel sherd was found in the disturbed part of Cist 5 (it is thought it was inside this cist initially) (Waddington et al. 2005: 65). All of the cists, except for Cist 4, were

exceptionally small and could only have held the bodies of neonates or

61. Holystone Common, Alwinton, Northumberland

Barrow 204 in Canon Greenwell's register is recorded as having been 7.3 m across and 1.1 m high (Greenwell 1877: 426). In the centre hollow, on the old ground surface, a cremation was buried, and just over a meter from this, a second cremation was found in a pit. At the centre of the mound, a cist was found set into the natural ground. It was filled with sand, clay and charcoal and contained a Food Vessel in the eastern corner (Greenwell 1877: 426-7).

Barrow 205 was roughly the same dimension as 204 and contained four cremation burials. The first was in a pit with a flint flake and a perforated bone, whilst the second was in a cist (Greenwell 1877: 427). This cremation was that of two adults and a child and the bones of a sheep/goat were also found charred, which Greenwell (1877: 427) attributed to a food offering. The final cremations were found buried on the natural surface, one accompanied by a piece of calcined flint and a pin, and the other with a pot (Greenwell 1877: 428). A second, smaller pot was found under the mound on the old surface alone.

62. Harbottle Peels, Alwinton, Northumberland

In a ruined cairn, Barrow 202, several burials, many in cists, were uncovered by Greenwell (1877: 422). The first and second cists were buried under the natural surface and both contained a Food Vessel (Greenwell 1877: 422-3). To the north of these, a Collared Urn was found in a pit inverted over the cremation of an adult, and nearby, the cremation of a child was deposited on the natural surface (Greenwell 1877: 423). To the northwest of these, 1.8 m away, a Food Vessel sat on the natural surface.

The third cist lay 3 m away from these burials and contained a Food Vessel in its northern corner, and a fourth cist, 5.5 m away from this, was empty (Greenwell 1877: 424).

In the extreme northwest of the barrow, a Food Vessel sat on the old ground surface, and the cremation of a man lay on the surface several meters from this (Greenwell 1877: 425).

63. High Buston, Northumberland

In 1957, a Food Vessel and two further Vase Urns were given to Jobey by Mr. Tait of Forest Hall for analysis (Jobey 1957: 269). They had been found in 1926 whilst work was being

done on the railway line near High Buston, between Warkworth and Alnmouth. A cist had revealed itself at this location that contained an inverted urn with some bones and, upon further digging, three more pots (one of which is now lost) were found around the cist (Jobey 1957: 270). The fourth pot is thought to also be a Food Vessel based on Tait's description. No indication of any other associations was given.

64. Castle Hill, Callaly, Northumberland

A Food Vessel with a label saying it came from the museum at Callaly Castle was found in a junk shop in the 1950s (Jobey 1960: 241). Antiquarian records mention its provenance as Castle Hill Quarry in Callaly and that it was found in November of 1891 (Jobey 1960: 242). No associations were recorded.

65. South Charlton, Northumberland

On a hill, 149 m OD and offering extensive views of Redesdale and the Cheviots, a cairn was found that measured 11 m in diameter (Hodgson 1917: 125). The site had been excavated for the extraction of sand for some time, but it was not until 1908 that a cist (containing only a piece of flint) was found (Hodgson 1917: 126). Subsequently, an urn with, "...much charcoal being found nearby" was uncovered, which provoked a full-scale investigation of the cairn in 1916 (Hodgson 1917: 128). A further 10 graves were found.

The first contained a Food Vessel, inverted over human bones, whilst the second had an upright Food Vessel filled with a cremation (Hodgson 1917: 128). The third pit held a Food Vessel on its side and a fill of bone and charcoal and two more pits nearby were simply filled with bones, charcoal and a few ceramic sherds (Hodgson 1917: 130). The sixth burial was in a cist with Food Vessel sherds. Similarly, the seventh cremation was also in a cist, but an entire incense cup accompanied the bones. Another pit was found with bone and charcoal and the remains of two Food Vessel pots, and the adjacent cist held a further Food Vessel and charcoal (Hodgson 1917: 132). The final cist to be found was empty.

66. Ratcheugh, Alnwick, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #75.

67. Warksworth, near Wark, Northumberland

Under a low barrow, an inhumation with a Food Vessel and cremations in an urn were uncovered (Greenwell 1877: 436).

68. Amble Quarry, Northumberland

Thompson (1884: 523) describes the excavation of a flat grave cemetery at Amble Quarry in 1883 in cists, many with flexed inhumations. From the descriptions, these consisted of Beakers, Food Vessels and a Collared Urn.

69. Ashington, Northumberland

Whilst laying cables in Woodhorn Road, Ashington, a Food Vessel was found on a raised bit of land at 110 m OD (Jobey 1960: 242). The location provides a good view of the River Wansbeck.

70. Harehaugh, Morpeth, Northumberland

Record of the context of this find could not be found in the literature.

71. Villa Real, Jesmond, Tyne & Wear

In a note, Blackbird (1828) mentions an urn that was found when trenching was being done for planting. It was in a cist with an inhumation. The pot is said to have been filled with, “...red-coloured earth...which the labourers threw out” (Blackbird 1828: 315).

72. Broomhill, High Mickley, Prudhoe, Northumberland

Whilst ploughing on a gravel ridge overlooking the Tyne Valley, 625 ft OD, a cist was found with pottery inside so the farmer immediately contacted the Museum of Antiquities (Newman 1977: 41). The ceramic remains were those of two Food Vessels, one containing cremated remains (Newman 1977: 42). The second was lying on its side in the cist and had been smashed by the plough, but was in association with the cremated remains of a child, 7-8 years of age, and a possible younger child. Newman (1977: 43) notes that the cist was of particular interest in that it held little charcoal and no ash.

73. Well House Farm, Newton, Northumberland

A cist was found by Mr. Richardson during ploughing at Well House Farm, Newton, at a site just above the 152 m OD contour, which overlooked an expanse of the surrounding farmland (Gates 1981: 45). Upon opening, he discovered two Food Vessels and so a team from the University of Newcastle were called to excavate the area shortly afterwards. The cist itself had been cut into the bedrock and contained a fill of sand mixed with charcoal and sherds, and the Food Vessels stood at opposite ends of the cist (Gates 1981: 46-7). Excavation revealed charcoal and a fusiform jet bead in the packing of the cist boulders, and one of the stones had been reddened by fire (which is thought to have been the result of local domestic activity before the burial) (Gates 1981: 48). A date of 1685 ± 120 b.c. was obtained from the charcoal and, although the species of wood is not identified in the report, the date is calibrated to 1445-1925 b.c.

74. Huntlaw, Hexham, Northumberland

In 1924, workmen at a quarry found a flexed inhumation burial in a cist that was accompanied by a vessel (*PSA, fourth series, 3: 19*). It is described as a Beaker, but the form and fabric is more in-keeping with the Food Vessel tradition. It is likely it was called a Beaker since the rest of the grave associations follow the trends known for Beaker burials.

75. Colwell, Hexham, Northumberland

A note records a Food Vessel having been acquired about 1900 that had been found at Colwell.

76. The Fawns, Kirkwhelpingham, Northumberland

Barrow 210 was 3.8 m in diameter and 0.9 m high (Greenwell 1877: 433). In a hollow in the natural surface, a cremation of an adult was found with a burnt piece of flint. *In situ* burning could be seen in this hollow. Also within the barrow, a cremation under an inverted urn was found on a slab that had been placed on the natural surface, and in the centre, a destroyed Cinerary urn was found amidst a scattered cremation.

Late Neolithic – Other contemporary pottery (Map 6.5)

1. Archerfield, Gullane, East Lothian

On the Archerfield Estate, in a ravine close to Gullane, two deposits of material were found 1.5 m apart by a natural loamy mound (Curle 1908: 308). Both were of similar size (3 x 4 m) and thickness (10 cm), and contained similar material – large quantities of mollusc shells, red deer bone, flint, a rubbing stone, and ceramic sherds from 18 pots (Curle 1908: 308-310). Curle (1908: 310) notes that the rubbing stone is, “...common among the relics of the Swiss Lake dwellings”, which would suggest an Iron Age date; however, the presence of a coin from Charles II’s reign indicates that contamination is a problem at this site. Moreover, Curle describes the lithics found in the deposits as typically Neolithic. Of the sherds of pottery found within these spreads, some display a coarser fabric lying beside others that have much finer matrices (Curle 1908: 309) – not unlike the ceramics found at North Berwick by Cree (a connection Curle makes), which would suggest that these belong in a Beaker time frame. The sherds that have the finer fabric are thin-walled and hard and all come from the early AOC Beaker tradition. They have dark red surfaces and fine cord impressions.

Curle describes a third midden a further 6 m from these deposits, which contains charcoal, charred wood, some shells, animal bones, and sherds from eight vessels (Curle 1908: 312). Although both fabrics are represented in this context, a third is also present, which is very

different from the first two. Curle (1908: 319) concludes that the site must represent a transitional period between the Neolithic and Bronze Age on account of the discrepancy in the lithic and ceramic styles. Despite the problems with contamination mentioned, this author would tend to agree as the ceramics consistently demonstrate a transitional nature centred on the earliest part of the Beaker period – something which is now known elsewhere. It is interesting to note that Curle describes a residue, or ‘soot’, present on the coarser ceramics and not the finer Beakers.

2. Hedderwick, East Lothian

See section: Late Neolithic – Impressed Ware, #1.

3. North Berwick Law, North Berwick, East Lothian

Whilst excavating ahead of the construction of an addition to his house, James E. Cree discovered two domestic deposits from the Beaker/Transitional period. The first deposit was 15 x 4.5 m in area and of substantial thickness to suggest the occupation lasted over a long period of time (Cree 1908: 259). The matrix of the deposit was composed of charcoal, AOC Beaker pot sherds, red and roe deer bones, and an abundance of shellfish – unsurprising as the sea is only 75 m from the site (Cree 1908: 259-269). A flint knife, a quernstone, stone pounders, and a polished stone axe were also found. Just beyond the northeast extent of the deposit, two “pillars” made of stones set in clay, were found set into the subsoil below the natural sand (Cree 1908: 259). These were secured with AOC Beaker pot sherds as packing around their bases.

The second deposit, extending 3 x 7.5 m in area, was found some 9 m away from the first one (Cree 1908: 277). This was found 1.5 m below the surface and existed as a horizon 30 cm thick. Within, flint scrapers were discovered, along with an even greater concentration of shellfish than deposit 1, and an abundance of AOC Beaker sherds were found (Cree 1908: 282). Interesting to note, though, is that within this assemblage, a coarser ware was also noted to have, “...a considerable resemblance in texture, thickness, and decoration to cinerary urns” (Cree 1908: 293). Indeed, from the images in the report, these have profiles in keeping with

both Impressed Ware and Food Vessels. Their association with early AOC Beaker sherds suggests that they may be Tyne-Forth Regional Ware ceramics.

4. Pencraig Wood, East Lothian

Early Neolithic

An Early Neolithic long cairn was found at Pencraig Hill, which was surrounded by linear ditches on three sides (Figure 6.21a)(McGregor & McLellan 2009: 34). An alignment of postholes at one end was interpreted as having held upright timbers that formed a façade or screen for the mound. Deposits of Carinated Bowl, cereal grains and charcoal were found in the ditches. A suite of radiocarbon dates places these events in the early fourth millennium BC (McGregor & McLellan 2009: 37). Underneath the cairn was a series of deposits of cremated human bone and it is thought to have originated as a location for funeral pyres before the mound was raised overtop (McGregor & McLellan 2009: 41).

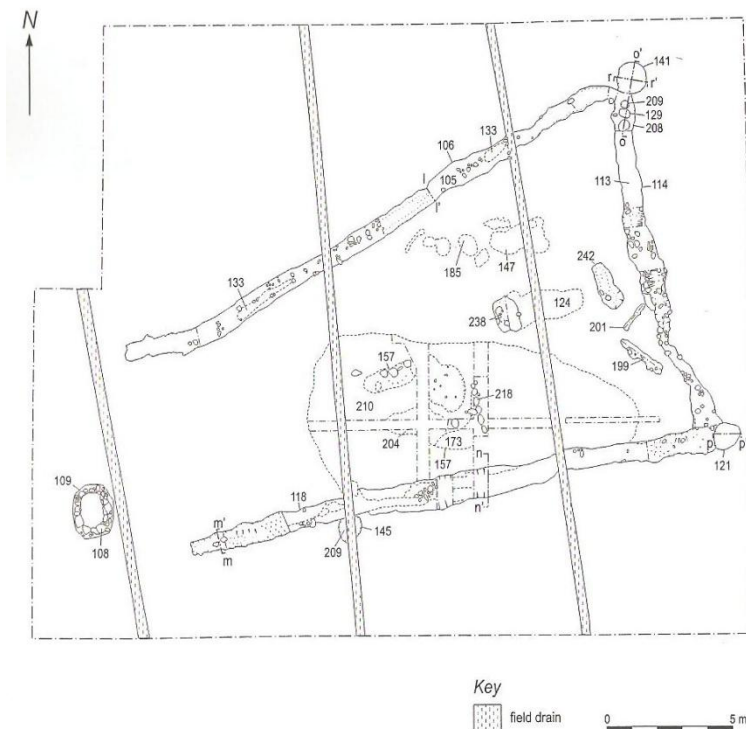


Figure 6.21a: Pencraig Hill, plan of long mound (from MacGregor & McLellan 2009, 34)

Late Neolithic

A pit was also found in Pencraig Wood with fills containing burnt hazelnut shell, charcoal and sherds from coarse vessels, wattle and the cremated remains of at least one adult (Shearer & McLellan 2009: 92). At the base of the pit was a stakehole that had held a stake after the burial and was subsequently burnt. Two other pits contained similar material and more coarse sherds. Sheridan suggests that these vessels may be Impressed Ware, but radiocarbon dates from the first pit calibrated late to c. 2480-2230 cal BC and 2460-2200 cal BC. In addition, the characteristics of the sherds show a mixing of traditions, using grooving, fingernail impressions and comb.

5. Whitton Hill, (Milfield), Northumberland.

The sites at Whitton Hill were first noticed by Prof. N. McCord during his aerial surveys of the region in the 1970s (Miket 1985: 137). Several small ring-ditches dot this part of the Milfield Basin, fitting into three basic types: 1) those 3.5 m in diameter with a ditch 2 m wide (3 represented); 2) those 9-20 m in diameter with a ditch less than 1 m wide (3 represented); and 3) a ditch with an internal ring of posts (1 represented). Two of these were selected for excavation; Whitton Hill 1 is of type 3, whilst it is not stated which category Whitton Hill 2 falls into, it is thought it is type 2.

Whitton Hill 1 (Figure 6.22a)

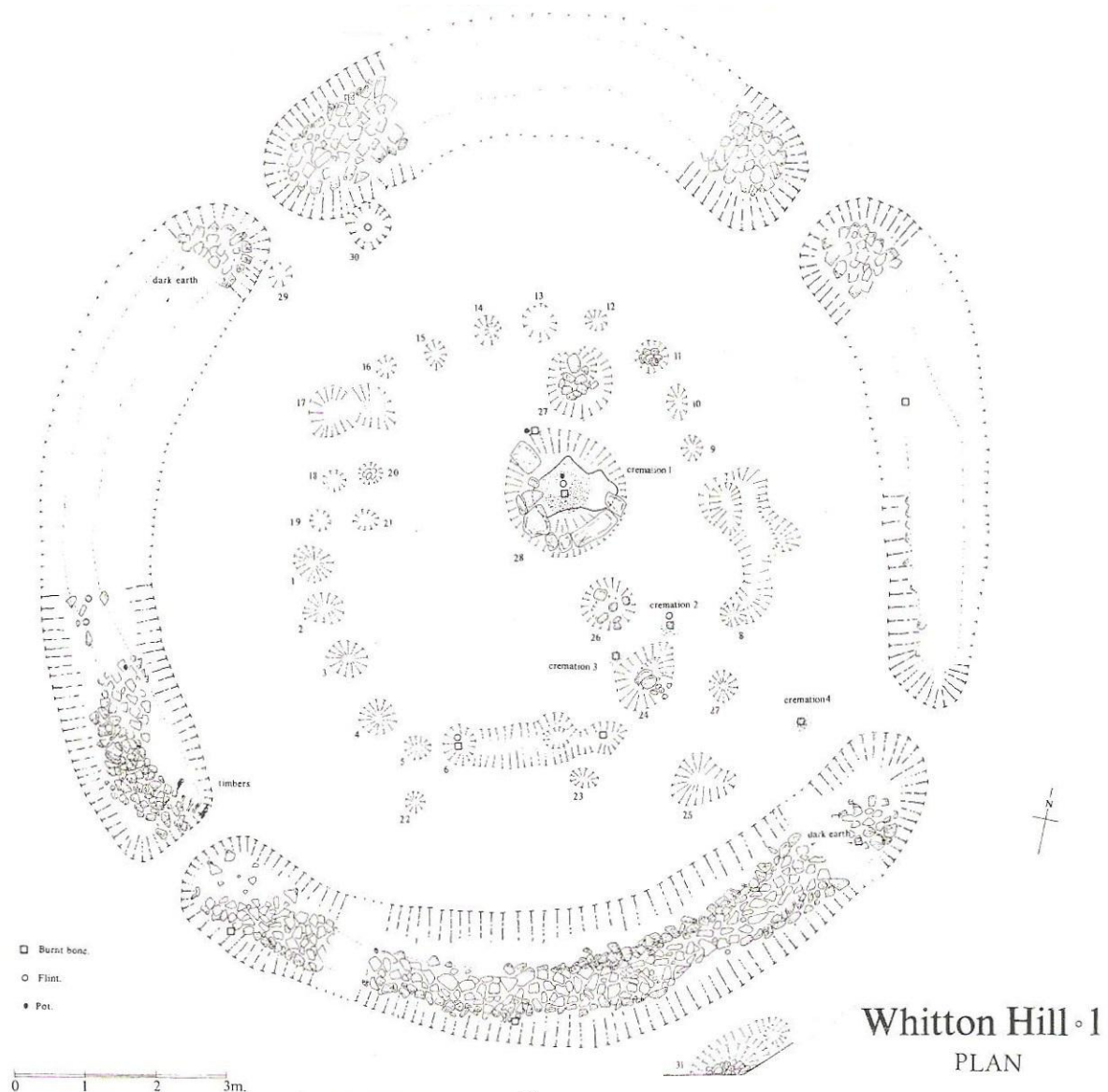


Figure 6.22a: Whitton Hill I, site plan (from Miket 1985, 138)

Site 1 consisted of a 2 m wide ditch, broken by four causeways, with an internal ring of pits, three central pits, and several others scattered inside the ditch (Miket 1985: 137). The ditch contained three distinct layers: a clean sand/gravel at the bottom, put in about the same time it was dug; sandstone blocks set along the centre of the ditch; and a matrix of burnt material including bone, hazelnut fragments, ceramic sherds (P1), and charcoal set around the stones (Miket 1985: 138). Five charred timber posts were found set on their sides in the bottom of the ditch, pointing towards its centre, like a platform or floor. Cereal grains of emmer wheat and barley were also recovered and the remains of cremations 8-16 were found in this fill.

Charcoal from the timbers yielded a date of 1730 ± 80 bc and 1790 ± 50 bc (uncalibrated) in bulk samples.

Inside the ditch, 21 pits were found in a ring with a diameter of 10.3 m (Miket 1985: 139). All contained dark earth and stones, except for: Pit 6, which held four aligned post-pipes, agate, and burnt bone from cremations 5 and 6 (Miket 1985: 139); Pit 7, which held two fragments of burnt bone (cremation 7); and Pits 13 and 14, which each had post-pipes.

Within this ring were pits 22-31. These, again, mostly contained a dark fill; however, pits 24, 28, 30 and 31 were more complex (Miket 1985: 140). Pit 24 contained a post-pipe and cremation 23.

Pit 28 was paved with a flat sandstone slab on its bottom and on this was an inverted pot (P3) with the cremation of an adult inside. A radiocarbon date from this material put it at 1710 ± 50 bc, but again it is warned that this is uncalibrated. A dark fill covered the burial and stones had been placed in a V-formation on top. Above a further fill, more sherds were deposited (P2).

Pit 30 held a post-pipe, but Pit 3, which was found outside the ditch, had a large boulder in it and dark fill with stone packing underneath.

Further cremations had later been buried on the site within the ditch. These included cremation 2, that of a young child accompanied by a small blade, put in a pit near pit 24 and partially into its fill. Cremation 3 was also near pit 24 and partially in it, whilst cremation 4 was found as a surface deposit.

Whitton Hill 2 (Figure 6.23a)

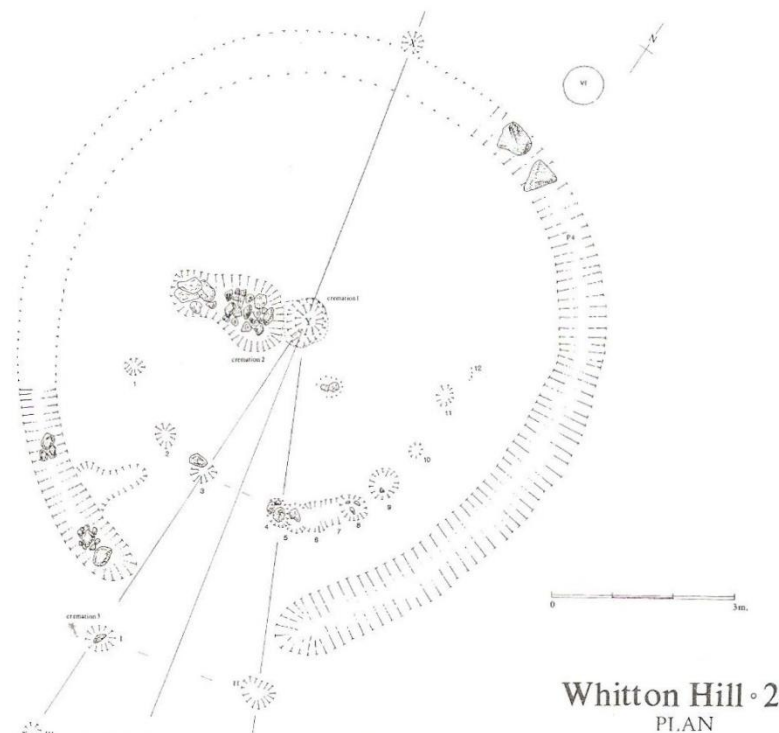


Figure 6.23a: Whitton Hill 2, site plan (from Miket 1985, 144)

The earliest remains from Site 2 consist of a thin charcoal soil patch that dated to 2870 ± 80 bc. This was subsequently cut by the enclosure at its southern entrance (Miket 1985: 144). This was cut only 0.56 m deep, but contained one fill and two deposits. Once a dark silty soil had collected in the ditch base, charcoal and burnt bone was deposited around sandstone boulders set in the bottom of the ditch. This dated to 1650 ± 45 uncal bc. Deposit 2 was similarly charcoal-rich and revealed the remains of a thick-walled vessel (P4). The charcoal from this deposit radiocarbon dated to 820 ± 70 bc.

Three pits outside the entrance to the monument contained dark soil, and the first of these, Pit I, held the cremation of a “light-built” person and charcoal, which dated to 910 ± 90 bc (Miket 1985: 144).

The central pit inside the ditch, Pit Y, held the cremations of at least 23 people, including four infants, 15 adults, 3 neonates and 3-4 children. Its upper fill yielded a radiocarbon date of 930 ± 310 bc and this was sealed with a sandstone slab topped with five quartz pebbles and a “mounding of earth” (Miket 1985: 144).

Pit 3 was an elongated pit, measuring 1.10m wide and 2 m long, and cut Pit Y at its western edge. Three angular stone uprights were set along its axis and more stone fragments and burnt bone were found within (Miket 1985: 144).

6. Milfield North Henge, Northumberland

This monument was first noted during aerial survey in the 1960s, and was then excavated by Anthony Harding in 1975 and 1977 (Harding 1981: 101). The site consists of a henge with

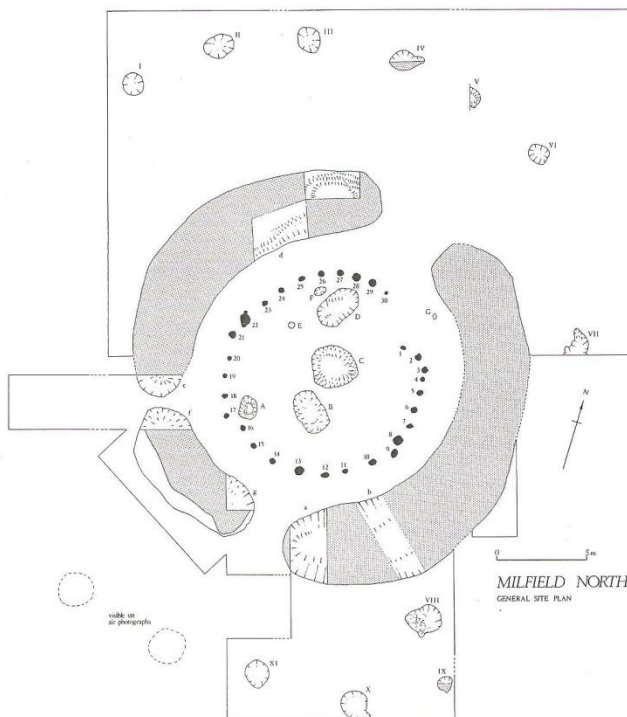


Figure 6.24a: Milfield North Henge, site plan (from Harding 1981, 103)

three entrances (to the north, south and southwest), three internal pits and an outlier pit aligned with the northern entrance (Figure 6.24a). An external circle of pits around the monument would have held timber posts that lined the perimeter of the henge's external bank (Harding 1981: 105).

Eleven of the estimated thirteen postholes in the external post ring were excavated first. These averaged just over 1 m in diameter and were mostly steep-sided and

flat bottomed. Most exhibited a 'slumping' of their fills, suggesting that they had held

posts that were later extracted (Harding 1981: 101-108). The eleven explored pits are summarized as follows:

Pit	Size	Fill	Extra details
1	1 m diameter, 0.8m deep	Probable post, later removed.	
2	1.2 m diameter, 0.48 m deep		

3	0.7 m diameter, 0.9 m deep	Post pipe with redeposited upper layer	Steep-sided, flat bottom.
4	1.5 m diameter, narrowing to base, 1 m deep		Stepped pit with irregular shape.
5	1.1 m at top and 0.14 m at bottom, 0.88 m deep.	Looks like held post.	
6	1.1 m at top, 0.98 m at bottom.		Cut by Anglo-Saxon grave.
7	1.52 m diameter		Recorded by aerial survey, not dug.
8	2 m diameter, 1.2 m deep	Gravel fill with silt in bottom; lot packing stone in slump as if post taken out. Six barbed-and-tanged arrowheads found under stone packing.	This is not in the ring, but closer to the henge and underneath the supposed bank.
9	1.22 m diameter, 0.82 m deep.	Post-pipe.	
10	1.3 m diameter, 1.3 m deep	Gravel fill with silt in centre at bottom (where post taken out?); charcoal.	
11	1.4-1.6 m diameter, 1.15 m deep.	Gravel with grey silt in centre slumping as if post extracted; charcoal.	

The henge ditches were recorded as having rounded terminals at the three causeways and were consistent in their depth and width (Harding 1981: 108). Silting and iron objects found in the ditch bases suggest that the monument stood open for a long time after its inception and the prevalence of Anglo-Saxon burials within it indicates it must have been visible even as late as the 8th century AD.

Inside the ditch perimeter, a circle of 30 smaller internal pits were discovered (Harding 1981: 108). These ranged from 0.2-0.5 m in diameter and 0.13-0.39 m deep. They contained a grey

silt fill. The evenly-spaced pits were only broken by a gap roughly aligned with the henge's northern entrance.

Within the inner pit ring, four large pits that had been noted on the aerial photographs were also excavated (Harding 1981: 109). Pit A was found to be oval, 1.35 x 1.08 m in diameter, and contained an empty cist. Pit B was oblong, 2.26 x 1.3 m and 1.35 m deep. It had stone packing in its fill, mixed with a single flint, pot sherds (P1) and two upright stones. Harding (1981: 111) believes this to have been a grave stance, although no body was found. Pit C was oval, measuring 2.72 x 2.4 m in diameter and 1.44 m deep, and was located in the middle of the henge's internal space. It contained a fill of large stones and soil. Charcoal under this fill in the northern part of the pit allowed for a radiocarbon determination of 1800 ± 80 bc, and a dark grey silt under this contained a Food Vessel (P5). Harding concluded that the slumping of the fill suggests the pit had contained a wooden coffin originally protecting the pot that fell inward when it rotted. Pit D was also oblong, measuring 2.62 x 1.5 m in diameter, and 0.84 m deep (Harding 1981: 112). It contained only a burnt layer. Three other pits were also found in the henge, but these were not explored.

The outlying pit had originally been identified on the aerial photographs of the site. It lay 35 m from the southern entrance to the henge and proved to be a large 'bowl-like' feature that had been re-cut several times (Harding 1981: 112). The first amendment to the pit had widened it for the internment of a cremation and it had then been extended to 2 m in diameter to encase a charcoal-rich layer. Subsequent re-cuts ended with the placement of a timber post.

7. Milfield North pit alignment, Northumberland

Running east to west is a double pit alignment that stops just 180 m north of the Milfield North henge (Harding 1981: 115). In 1978, the two eastern pits were excavated. The first pit was 1 m deep and contained a fill of stone, calcined bone and charcoal in its upper half and a slumping fill in its lower half (Harding 1981: 116). From the sloping side on one half of the pit, along with its lower fill, Harding determined that the pit must have originally held a post that was later extracted. The upper fill would then have been put into the pit to re-fill it.

The second pit was 0.88 m deep and contained a fill of ceramic sherds, thought to be Grooved Ware, charcoal, calcined bone and a flint flake. This fill also slumped as if the pit

had once held a post that was later removed. Three radiocarbon dates of 1790 ± 50 bc, 1820 ± 50 bc and 1655 ± 80 bc were determined (Harding 1981: 116).

8. Whitton Park, (Milfield), Northumberland

In 2004, ARS Ltd. excavated an area near Milfield Village in anticipation of a house construction and discovered eight archaeological features: six postholes, a stakehole and a pit (Figure 6.25a) (Waddington 2006: 13). The postholes contained similar fills of stone packing and sand and in the cases of pits 21 and 27, sherds of the same type of pottery were found in the pit bases. An AMS date from pit fill 27 was calibrated to 2120-2090 cal BC and 2050-1890 cal BC (2 sigma)(Waddington 2004: 13). The arrangement of the pits is in a triangular shape, which Waddington (2006: 15-17) compares to the Early Neolithic structures found at Bolam Lake and Thirlings; however, this author would argue that these pits might only represent the larger posts of a structure that could have had any shape. Erosion and the use of deep ploughing has caused most archaeological sites in the Milfield Basin to be truncated and it is likely that smaller posts and stakes will have been present at most of the sites (see discussion in Chapter 9 regarding Thirlings). The finds at Whitton Park included residual Mesolithic worked flint and agate and 10 sherds of pottery (nine from pit 27 and one from pit 21) (Waddington 2006: 19-20).

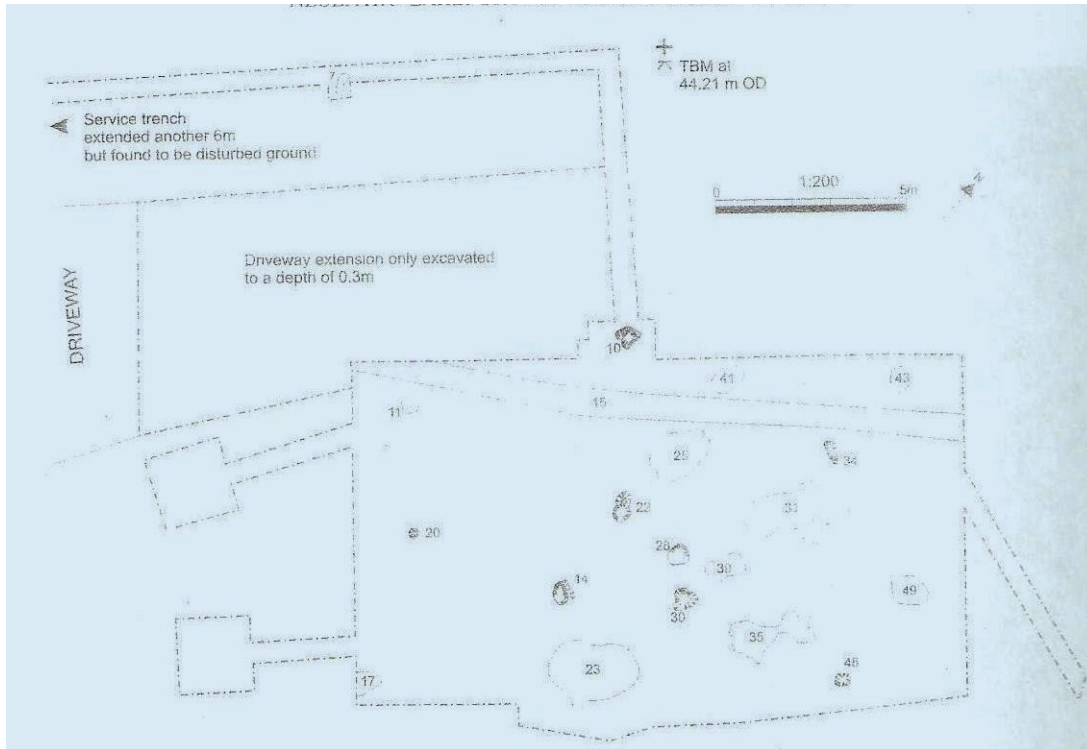


Figure 6.25a: Whitton Park, site plan (from Waddington 2006, 15)

9. Cheviot Quarry, (Milfield), Northumberland

See section: Late Neolithic – Impressed Ware, #11.

10. Thirlings, (Milfield), Northumberland

See section: Late Neolithic – Impressed Ware, #14.

11. Yeavinger Henge, Northumberland

Yeavinger Henge was built on the slope of Yeavinger Bell at approximately 68 m OD. It comprised a segmented circular ditch that had rounded terminal ends at the two opposing eastern and western causeways (Figure 6.26a). Four parts of the Yeavinger Henge ditch, as well as associated pits were excavated by Harding in his evaluation of the Milfield Basin, Northumberland.

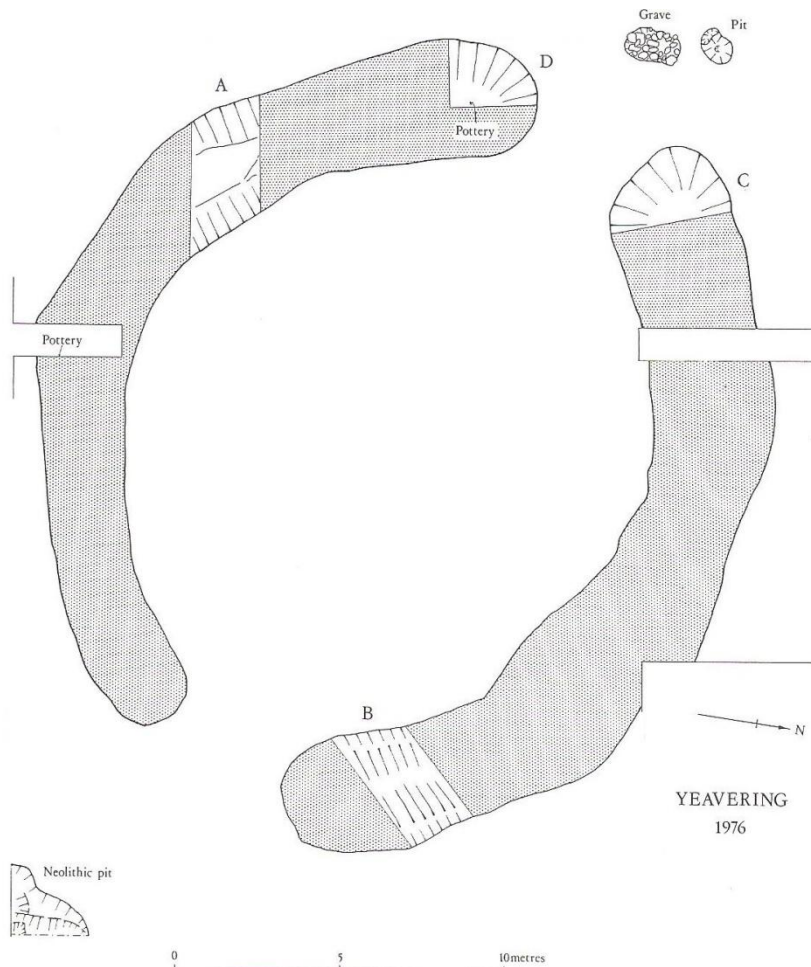


Figure 6.26a: Yeavinger Henge - site plan (from Harding 1981, 121)

The ditch was found to have gently sloping sides and a flattish bottom (Harding 1981: 122). The natural silting in the ditches demonstrated it had been left open for some time, but it is not certain if it was visible by the time the Yeavinger Palace was built, as the Milfield North henge certainly was.

Outside of the henge, three pits that most likely date to separate periods were found. Only 2 m outside the eastern entrance to the henge, an oval pit, measuring 1.96 x 1.14m, was discovered (Harding 1981: 122). It contained a body stain of a flexed inhumation. Although he does not mention it, Harding's description alludes to a classic Beaker-style burial. To the north of this, an irregular pit, 0.8 x 0.62 m in diameter, contained carbonized nuts in its upper fill and a burnt layer that yielded a radiocarbon date of 2940±90 bc (Harding 1981: 122). The final pit was 6 m outside the eastern entrance and contained a deposit with Early Neolithic Carinated Bowl pottery.

12. Chatton Sandyford, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #73; but note very early radiocarbon date from the grave in the small cairn.

13. Lookout Plantation, Northumberland

Located in the Till Valley, 5.5 km south of the River Tweed, Lookout Plantation lies at an elevation of 61m OD, 1 km west of Etal and the River Till. The site was first recognized during an aerial survey and was thought to be a ring ditch before 1980, but when it was excavated in anticipation of the Frigg IV gas pipeline, an unenclosed platform settlement was revealed (Monaghan 1994: 29). Lookout Plantation consists of three parts: the external heptagonal ring, measuring 10.3 m in diameter (north to south); an entrance, including a porch area that is defined by a threshold stone and two parallel rows of posts; and an internal ring of posts, interpreted as roof supports, measuring 1.5 m in diameter (Figure 6.27a) (Monaghan 1994: 29-30).

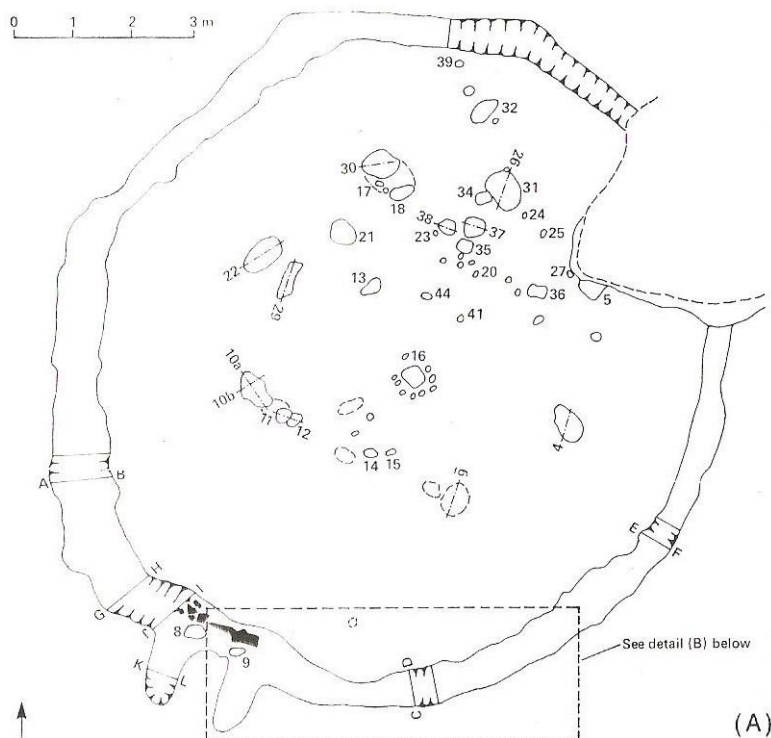


Figure 6.27a: Lookout Plantation, site plan (from Monaghan 1994, 31)

During excavation, a rim sherd was found in the external ring that bears characteristics of local Late Neolithic/Early Bronze Age wares, but has a red slip that Isla McInnes, “...suggests...may reflect an attempt to copy Beaker characteristics” (Monaghan 1994: 35).

Although no associated date was obtained for this sherd, a polished stone axe displaying wear patterns, was also found in the external ring.

The remaining archaeological material was found within the confines of the internal ring of posts. These consisted of four sherds of pottery, three of similar fabric that have been attributed to the 'flat-rimmed ware' designation, and one bipartite rim sherd with a slightly different fabric (Monaghan 1994: 35). Although the flat-rimmed ware category is somewhat elusive, in that, it is used to describe plain, bucket-shaped pots from both ritual and domestic sites from the third to the first millennium BC, Monaghan (1994: 35) stylistically connects these sherds with those from other unenclosed platform sites in Derbyshire and Scotland, suggesting a contemporary style.

Four radiocarbon dates were determined at Lookout Plantation. Two from the porch place its construction around 1420 BC or 1460 BC, and two others from the inner post ring (which was reconstructed several times) suggest an end date of about 1140 BC or 1280 BC (Monaghan 1994: 37). Although the samples from the inner post ring are admittedly small, and all came from bulk wood samples (no indication of species is given in the report), these do lie within the expected range for unenclosed platform sites in Britain.

14. Hirst, Ashington, Northumberland

A coarse vessel was acquired by the Museum of Antiquities in 1894. It has a Beaker-like shape, but the decoration consists of two rows of stabmarks and it is crudely-made. It would best fit Clarke's 'degenerate' category.

15. Ross Links, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #60.

Early Bronze Age/Middle Bronze Age - Vase Urns, Collared Urns, Cordoned Urns.

Vase Urns (Map 6.6).

1. Birsley, Tranent, East Lothian

Whilst digging a quarry, a Food Vessel was uncovered (Struthers 1879-80: 279). The men who were digging treated it roughly as they searched for any treasure that might have accompanied it and it was broken. However, upon investigation, a cist was found between 2.5-3.5 m from the find. The cist was, unfortunately, empty, but Struthers (1879-80: 280) mentions that the location was in a raised area with a good view of the Firth of Forth.

2. Lintlaw, Bunkle & Preston, Berwickshire

Whilst ploughing, a Collared Urn was found at 143 m OD at Lintlaw Farm in 1930 (Craw 1930-1: 359). It was inverted over the cremated remains of an individual and, upon excavation, a second inverted Vase Urn was found only 13 m away. Both of these lay within the perimeter of a ring of boulders, measuring 14 m across, that had once been the foundations of a cairn. Later fieldwork at the site revealed a cist partway between them (Craw 1930-1: 360). It was filled with soil, most likely caused by the prevalent mole action seen in and around the cist, and a flint flake, charcoal, a calcined bone fragment and a small wedge of iron (probably a secondary intrusion) were found inside.

3. Howlet's Ha', Westruther, Berwickshire

In the meeting minutes, a note of acquisition is made for the Vase Urn sherds found at Howlet's Ha' in 1859.

4. Hoprig, (Cockburnspath), Berwickshire

See section: Late Neolithic/Early Bronze Age – Beaker, #51.

5. Berwickshire?

In the list of donations to the museum in 1920-1 (*PSAS* 55: 21), a rim fragment of a Vase Urn and a second Vase Urn are included. They are unprovenanced and were likely found sometime in the 19th century.

6. Kylepark, (Uddingston), Lanarkshire

Whilst digging the ground for a road in 1883, an urn was found over human bones (Duncan 1884-5: 337). Upon inspection, a second was found nearby also inverted over human remains. The remains were those of an adult male and a young adult female (Duncan 1884-5: 340).

7. Cloburn Quarry, (Cairngryffe), Lanarkshire

See section: Late Neolithic/Early Bronze Age – Beaker, #34.

8. Tappitknowe, Hamildean Farm, Peeblesshire

In 1938, whilst digging in a gravel pit, a Vase Urn was found inverted over a cremation in a very small cist (Stevenson 1948-9: 231). The location of the find is 259 m OD and on a viewpoint 76 m over the Lyne Water with a good view of surrounding landscape.

9. Lilliesleaf, Roxburghshire

In 1914, Mr. A. Henderson Bishop donated a bronze palstave to the Glasgow Museum, which he said was found association with a rim sherd from an encrusted urn (Livens 1956: 30). The palstave was analysed and found to be a transitional piece, dating to sometime between the use of cast-flanged axes and palstaves. There is no indication of provenance for the artefacts other than that they were found on a rise in the land overlooking the Ale Water valley (Livens 1956: 31).

10. Scremerston Hill, Northumberland

A sherd from Scremerston Hill, Northumberland, was donated to the National Museum of Scotland in 1925 by Mr. Kinghorn. This was originally included in Piggott's list of Peterborough (Impressed) Ware in *Neolithic Cultures of the British Isles*, but here, Longworth (1962: 281) confirms it is a rim from an Vase Urn. No indication of context or associations are given.

11. Goatscrag, Northumberland

In 1967-8, Colin Burgess surveyed several of the rock shelters near Wooler to better understand their use in antiquity. One in particular, Goatscrag, which is the largest, and measures 200 m long and 9-12 m high (Burgess 1972: 18).

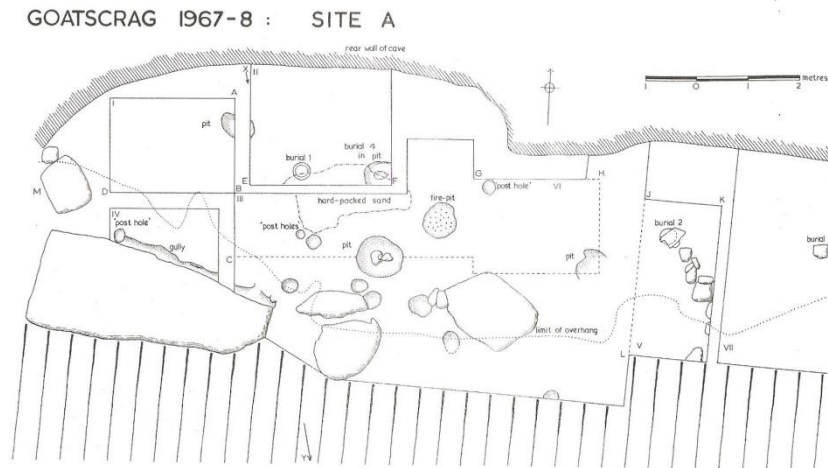


Figure 6.45a: Goatscrag, Site A plan (from Burgess 1972, 17)

Burgess split the area into portions for excavation and explored the east end (Site A) and the middle (Site B) of the site (Burgess 1972: 19).

The outcrop at Site A extends about 17 m east to west and overhangs 5.2 m (Figure 6.45a) (Burgess 1972: 19). Within this area, post-holes were found that may be the remains of a screen at the platform edge (although Burgess stresses he was not convinced at their alignment), four pits were found in the centre, along with four burials. Of the pits, only two produced material – one that contained burial 4 and a fire-pit, filled with birch charcoal and burnt bone (Burgess 1972: 22). It is not mentioned if samples were radiocarbon dated.

Burial 1 was an inverted Vase Urn found on the south side of Box II (units in this project were called boxes) – of approximately the middle of the site. Only the top portion of the

vessel remained, the bottom having been broken off (Burgess 1972: 25). Burgess (1972: 27) states that this must have occurred in antiquity as the sherds from the vessel bottom were found placed inside the pot on top of the cremation, rather than strewn across the site. It is likely that the pot broke whilst being buried with the sand that was so tightly packed over it. The cremation was that of a young adult male.

Burial 4, located only 1 m to the east of Burial 1, was found in a pit with vertical sides and a flat bottom (Burgess 1972: 28). The burnt bones of an adult were found at the bottom of the pit, along with a burnt flake. The same packed sand as Burial 1 covered the burial and sherd from an urn very much like the first burial was found at the bottom of this packing. Burgess (1972: 28) states that it was not clear if this sherd represented a separate Food Vessel for Burial 4, or if it was a residual sherd from the broken pot of Burial 1.

Burial 2, found in the eastern portion of the site in Box V, consisted of an inverted Vase Urn with a stone slab placed on top and the entire pot encased in sand (Burgess 1972: 29). The 'poorly cremated' bone of a young adult, possibly female, and a child about 2 years of age, had been contained in the pot.

Burial 3 was found 2.75 m from Burial 2 at the extreme eastern edge of the site (Burgess 1972: 30). A slab of stone was found covering a dark stain in the soil, which contained the calcined bone of a young adult and a barrel-shaped (possibly lignite) bead and a large flint flake (Burgess 1972: 31). Nearby an abraded piece of pottery and a small flint endscraper were also uncovered, but it is not certain if they are related to the Early Bronze Age remains, particularly since the ceramic was of a much finer ware than the Vase Urns.

Site B (Figure 6.46a) was a more open platform, 18 m long, and more level than Site A

(Burgess 1972: 33). Four pits were found, which held nothing more than some birch and oak charcoal, and a gully, two scoops and stake-holes were similarly empty. Across the site, several Mesolithic flints were discovered. Three

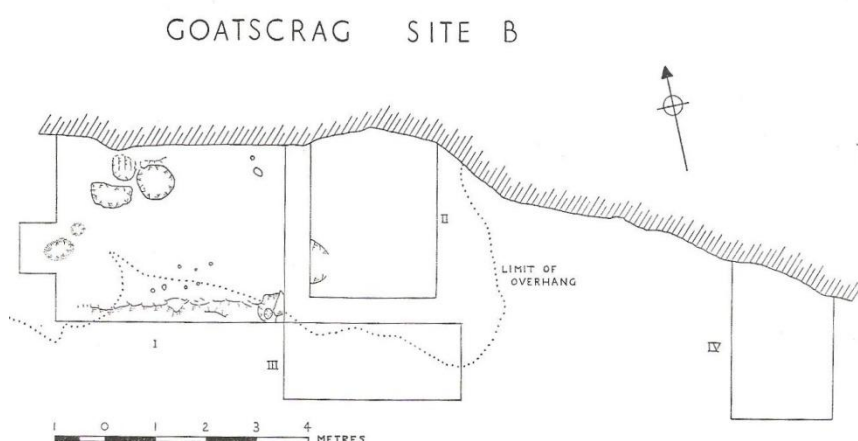


Figure 6.46a: Goatscrag, Site B plan (from Burgess 1972, 30)

other sites were also explored: Bowden Doors, Roughting Linn and Raven's Crag, but only a few remains of Mesolithic activity were found.

12. Rosebrough, (Bamburgh), Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #67.

13. Chatton Sandyford, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #73.

14. High Buston, Northumberland

See section: Late Neolithic/Early Bronze Age – Food Vessels, #63.

15. Ryton-on-Tyne, Tyne & Wear

Whilst digging in a sand pit in 1928, a boy found a Vase Urn as it fell out of the side of the pit and rolled down towards him. It is thought the urn was just below the surface (Brewis 1929: 196-8). The position of the urn was not determined and no associated artefacts were found.

Collared Urns (Map 6.7)

1. East Links, Dunbar, East Lothian

In a note of donations made to the Museum of Scotland in 1973-4 (*PSAS 105*), part of a Collared Urn is listed. It is stated it was found 'long ago'.

2. Meiklerigg, Stenton, East Lothian

In 1877, a mound that measured 12 m across was explored (Marjoribanks 1879-80: 220). Under this mound was a cist, set on the old ground surface, that contained an inverted urn, filled with a cremation (Marjoribanks 1879-80: 221). Near this, a second cist was found that held a piece of skull, a flint knife and a whetstone.

3. Longniddry, Boglehill Wood, East Lothian

See section: Late Neolithic/Early Bronze Age – Beaker, #13.

4. Quarryford, Haddington, East Lothian

Whilst ploughing a ‘gravel mound’ on a knoll, a Collared urn was found in 1882 just below the surface (Smith 1881-2: 297). The pot was inverted over a cremation burial and filled with blackened and burnt clay, bone, ashes, and charcoal. Since it was hit by the plough, the base of the pot was smashed, leaving only the upper portion of the vessel (Smith 1881-2: 298).

5. Traprain Law, Prestonkirk, East Lothian

Beginning in 1916, the Iron Age hillfort at Traprain Law was excavated off and on for several years. It is Curle’s 1920-1 publication; however, that discusses the Bronze Age remains found on the site. On a natural precipice on the hill, four cinerary urns were uncovered along with an incense cup at the site’s lowest levels (Curle 1920-1: 163). The Collared Urns were inverted over cremations, and it is the largest of these that also enclosed the incense cup. Also found at this stratigraphic level, but not necessarily in association with the pots, were 11 stone chisels, a bronze chisel and part of a socketed axe (Curle 1920-1: 164-5). Curle (1920-1: 167) laments the poor stratigraphy of the site: “We have, as last year, illustrated in association the various objects found on each level; but it will be observed, ..., that in various cases objects seemingly from the same level are obviously not coeval.” Indeed, Roman and Victorian artefacts were also found in the same area, but it is the mere presence of these pre-Iron Age objects as well as Beaker sherds and a saddle quern that indicate a prehistoric occupation.

6. Eweford, East Lothian

See section: Late Neolithic – Grooved Ware, #3.

7. Kirkpark, Musselburgh, Midlothian

The cremation cemetery at Kirkpark, Musselburgh, was discovered when a cinerary urn containing bones was found in a sandpit by workmen near the Musselburgh station (Anderson 1893-4: 62). A few years later, a second urn was uncovered and although it was destroyed, Anderson went to the sand pit to investigate. Upon arrival, he noted a discolouration in the soil and, “sliced it down” to find two Collared Urns (#1, 2); the larger (#2) was inverted over a cremation within this dark layer (Anderson 1893-4: 63). The following day, Anderson reports finding two more urns, each with a slab of stone covering the cremations they held; the first was destroyed, but the second was a Cordoned Urn, recovered in sherds (#3).

In another darkened patch of soil, also roughly rectangular in shape, Anderson found two further urns. The first (#4) was a small tub-shaped pot, found on the sand above the darker soil, but the second (#5), a miniature Collared Urn, was within the black material (Anderson 1893-4: 63). Both were sitting upright.

A few days later, a grave with four more urns were found. A Cordoned Urn was inverted over an accessory vessel at the top of the grave (#6, 7), whilst another accessory vessel (#8) lay just below these (Anderson 1893-4: 64). Just adjacent to this was an accessory vessel (#9) lying amongst the bones.

One week later, Anderson returned to find the tenth Bucket Urn on the edge of another black deposit (Anderson 1893-4: 64). It was broken and in sherds, but had been sitting upright as well. Further along, another Bucket Urn was uncovered (#11) four feet below the surface. It was also broken, but the bones it had held were recovered along with a flint chip. At this time, Anderson reports finding eight more graves, indicated by rectangular, black deposits, that were empty of archaeological material.

Upon his final visit, Anderson found several more urns within the same area. Near to the surface, a vessel (#12) was set upright and was filled to the brim with bones. It was not within a black patch, but had been set into the natural sand, and it crumbled upon removal (Anderson 1893-4: 65). To the south of this, two rectangular graves sat side by side and each had Collared Urns inverted over bones (#13, 14). Anderson (1893-4: 65) notes that some of the bones were dyed a green colour, which he attributes to the former presence of bronze (a

common conclusion in literature of this period). The final grave he found this day consisted of a pot set upright. It was empty, but marked by stones set around it to protect it.

Anderson notes that, over time, a further three urns were found as well, but were destroyed before he could arrive at the site. Anderson's account is written differently than more modern reports that are enriched by a better knowledge of prehistoric Britain and so it is more challenging to discern how this monument fits into the wider understanding of the region. However, he seems to anticipate this by attempting to describe the site and its environs in detail. From this it would seem that Kirkpark represents a Bronze Age cairnfield or cairn cemetery.

8. Dalkeith, Midlothian

This vessel is included in the 1892 inventory for the Museum of Scotland; however, no provenance is given.

9. Cranston, Blacklaw Knoll, Slaughland Farm, Ford, Midlothian

Both the 1892 inventory of artefacts in the Museum of Scotland and Abercromby (1912) list this vessel, but the provenance is unknown.

10. Toxside sand pit, Temple, Midlothian

Whilst digging in a sand quarry, Mr. John Smail noticed an urn sticking out of the soil. It was inverted over cremated human remains, the sherds of a second vessel with cord decoration, and two fragments of a bronze awl (Callander 1932: 402). The remains were identified as that of a woman aged 20-25 years.

11. Outerston Hill, Temple, Midlothian

In 1938, an urn was seen popping out of a gravel pit (Stevenson 1938-9: 229). The Museum of Antiquities in Edinburgh was called and Robert Stevenson went to the site to excavate. On a gravel ridge, with a good view of Moorflats, Pentlands and the plain of Lothian, the

cremation of an adult had been placed under an inverted urn and a slab of stone placed on top. Just adjacent to this, Stevenson uncovered a pit filled with burnt wood, burnt pebbles, hazel charcoal, along with a calcined flint flake, and an unburnt ox or deer bone pin (Stevenson 1938-9: 230). Smashed sherds of a separate ceramic vessel were also found within the burnt material.

12. Arniston Temple, Midlothian

In a note of acquisition in the 1857-9 issue of PSAS, two large Collared Urns are listed. They were found whilst ploughing and since both were inverted, presumably over cremated remains, their bottoms were destroyed.

13. Torcraik, Borthwick, Midlothian

In an inventory of artefacts at the Museum of Scotland in 1892, this vessel is included but no provenance is recorded.

14. Magdalen Bridge, Joppa, Portobello, Midlothian

In 1881, workmen removing sand found a large urn filled with a cremation (Lowson 1881-2: 419). Six more urns were subsequently found, also containing bones. One was found in association with a small bronze blade and some of the bones were stained green.

Upon investigation, four burials were found. The first was marked by a cist and was found with a male inhumation and a flint chip. The second cist was empty, whilst the third held only a small, crumbled urn. Finally, the fourth held the inhumation of a flexed adult female in a typically Beaker-like position (Lowson 1881-2: 420). Lowson (1881-2: 420) notes that there is an oral tradition in the area of urns being found in this location.

15. Shandon Crescent, Edinburgh, Midlothian

In a note of acquisition, dated 1890, two Collared Urns that were found whilst the foundations of a house were dug are listed.

16. Craigentenny, Edinburgh, Midlothian

See section: Late Neolithic/Early Bronze Age – Beaker, #20.

17. Braid Hills, Edinburgh, Midlothian

On a flat part of a plateau, lying 183 m OD, a green-keeper at the Braid Hills Golf Course found a Collared Urn at the 9th hole (Coles 1899-1900: 489). Although it was in pieces, he called Fred Coles to inspect and investigation revealed it had been inverted over the cremated remains of a child (Coles 1899-1900: 490). A second Collared Urn was then found with cremated remains nearby alongside a third cremation in a pit. Coles (1899-1900: 489) remarks that this area is known for other finds, namely two empty cists and a cup-marked rock, and more may have existed, except that the area was extensively ploughed over the last few centuries.

18. Windy Goul, Arthur's Seat, Edinburgh, Midlothian

Whilst constructing a new road, several artefacts were uncovered, including a Collared Urn set upright in a cist (Logan 1854-7). The cist was a third filled with black, humic earth with charcoal pieces, as was the pot.

19. Juniper Green, Edinburgh, Midlothian

See section: Late Neolithic/Early Bronze Age – Food Vessels, #10.

20. Ratho, Edinburgh, Midlothian

In 1897, a cist with two inhumations was found dug into the bedrock at the quarry in Ratho (Smith 1995: 72). The capstone was recorded as having cup-and-ring carvings on its internal side, facing the inhumations. Almost a century later, a Bronze Age ring-ditch in the same area was explored during a salvage excavation, which revealed a multi-component site of Early Neolithic pits, Bronze Age funerary activity and an early historic palisaded enclosure.

The Bronze Age ring-ditch measured 9.2-10.6 m in diameter with a 4.4 m wide entrance to the east (Smith 1995: 78). The ditches had been dug in segments to create a circular enclosure and traces of charcoal, flint flakes and cereal grains were found in the ditches, suggesting people had moved around them over the time they had silted in naturally (Smith 1995: 80). Three burials were found inside. Cremation 1 consisted of an urn inverted over sherds of another pot, an incense cup, and the remains of a male, aged 40, who had had severe rheumatoid arthritis and would have required much care (Smith 1995: 80-4). Cremation 2 was also found within an inverted urn and was determined to have been the body of a male who died in his mid-30s (Smith 1995: 89-92). He is thought to have suffered from a slipped disc in his spine during life. The third cremation was that of an adult about 25 years old and was unurned in a pit (Smith 1995: 92-3).

A second ring-ditch was uncovered just 12 m from the first (Smith 1995: 96). It contained pits and is thought to have also been of a funerary nature.

Near both of these, a stone setting was also found, which is thought to have been a cist. A second destroyed ditch with five pits containing trace amounts of burnt bone and charcoal were concluded to be further burials associated with the site (Smith 1995: 95).

21. (Stackyardfield), Gourlaw, Midlothian

Whilst ploughing, a cist was discovered that contained a Collared Urn inverted over a cremation burial (Coles 1904-5: 411). The site consisted of a cairn on a rise in the land, 192 m OD, overlooking surrounding countryside. Thanks to the diligence of the farmer who found the cairn, much was recorded from this site and it was excavated immediately by Fred Coles. Within the cairn, a second, smaller urn was found with a stone slab on top of it. It had a dark residue in its bottom, but was otherwise empty of cultural material (Coles 1904-5:

412). To the south of this, more sherds and burnt bone from a separate burial were found and to the southeast of this, a further cremation (Coles 1904-5: 414-5). A final cremation was found approximately 1 m from these in association with a perforated piece of bone. Within the cairn fill, a polished, trapezoidal stone, interpreted as a whetstone, was found (Coles 1904-5: 418).

22. Cairnpapple, Torphichen, West Lothian

See section: Late Neolithic/Early Bronze Age – Beaker, #23.

23. Drumshargard, Cambuslang, Lanarkshire

See section: Late Neolithic/Early Bronze Age – Food Vessel, #15.

24. Sherifflats, Thankerton, Lanarkshire

See section: Early/Middle Bronze Age – Vase Urns, #6.

25. Hangingshaw Plantation, Lamington, Lanarkshire

A Collared Urn is listed in the notes of donations to the museum in the 1902-3 issue of PSAS. It is described as having been found inverted over the cremated remains of a gracile adult, most likely a female, just under the ground surface.

26. Cairngryffe, Pettinain, Lanarkshire

On Pettinain Hill, just down-slope from the Iron Age hillfort, several mounds were noted, including one that looks like it may have been part of an enclosure (Christison 1890-1: 326). Just beyond this, a cairn containing, "...a large urn, surrounded by five smaller ones" was found (Christison 1890-1: 327). It is thought by the author of the report that this was the Hero's Cairn; however, subsequent excavation by Stevenson (1975-6) of the actual Hero's

Cairn (see section: Late Neolithic/Early Bronze Age – Food Vessels, #17) demonstrates this is a separate site.

27. Cadder, Bishopbriggs, Lanarkshire

See section: Late Neolithic/Early Bronze Age – Food Vessels, #13.

28. Kylepark, Uddingston, Lanarkshire

See section: Early/Middle Bronze Age – Vase Urns, #6.

29. Lintshie Gutter, Crawford, Lanarkshire

At 300 m OD, a series of 32 platform settlements were discovered and excavated before the construction of the M74/M6 roadway (Terry 1995: 369). The platforms spread to both the east and west sides of the Lintshie Burn along the north-facing contour of the hill, and aside from the abnormal facing direction, the platforms and their contents followed the typical remains for an unenclosed platform settlement (Figure 6.47a). All had fronts that had been cut by the plough and most were comprised simply of flat platforms, although three had stone banks to the rear (Terry 1995: 371). In total, eight of the 32 stances were excavated.

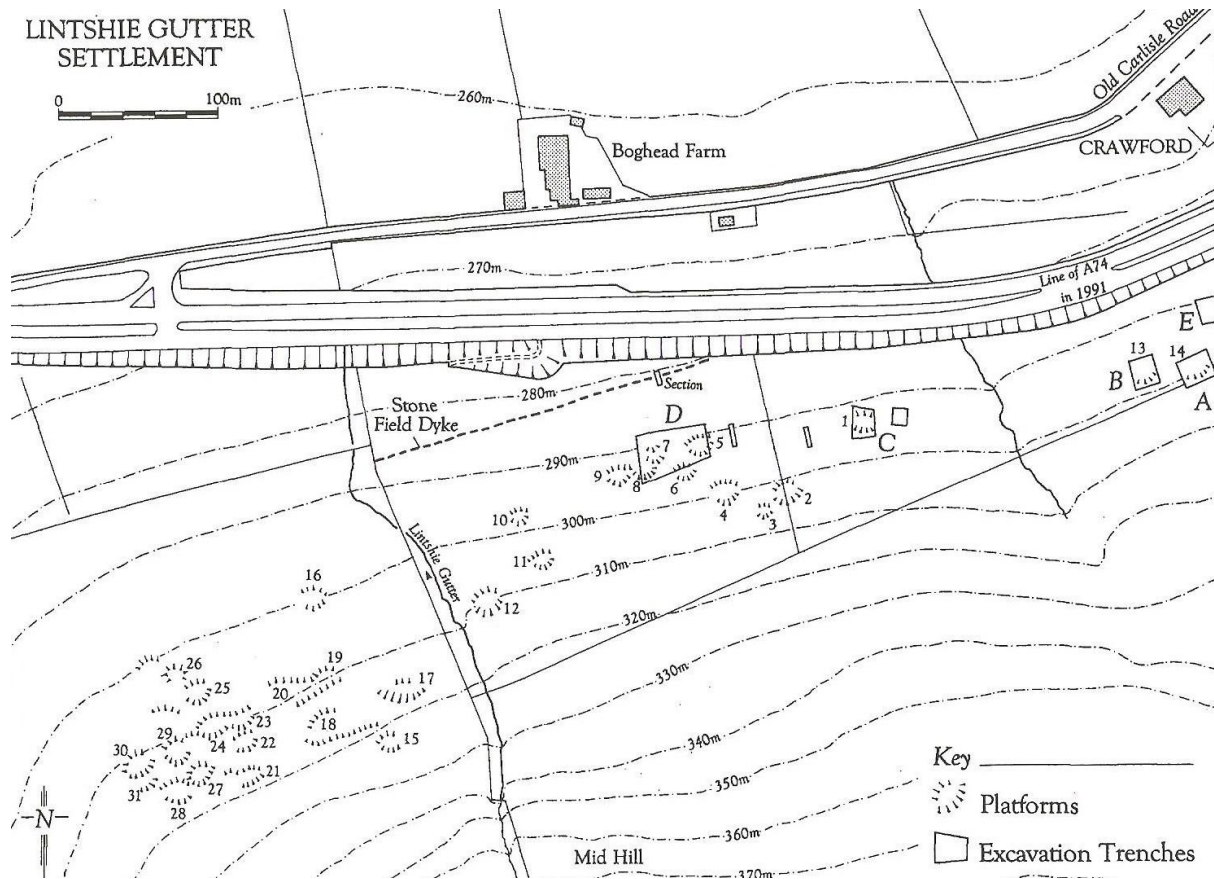


Figure 6.47a: Lintshie Gutter, site plan (from Terry 1995, 373)

Platforms 14 and 13 lay at the easterly extremity of the site and sat together in isolation from the rest of the houses. The furthest, Platform 14 (Figure 6.48a), had been cut by a modern drystone wall at its rear (Terry 1995: 374). It consisted of two superimposed ring-grooves and floors, both of which were approximately 9 m in diameter. Post-holes from the first phase were found sealed by the floor of the second, and pottery sherds were found in both components. Similarly, Platform 13 (Figure 6.49a) had two phases visible at the back of the platform, which showed evenly spaced posts at 1.5 m intervals (Terry 1995: 378). Stone ‘spreads’ were found outside the circumference of these perimeters, and a hearth with alder and hazel charcoal was radiocarbon dated to 1600 ± 130 uncal BC (2280-1530 BC, calibrated at 2 sigma) (Terry 1995: 423).

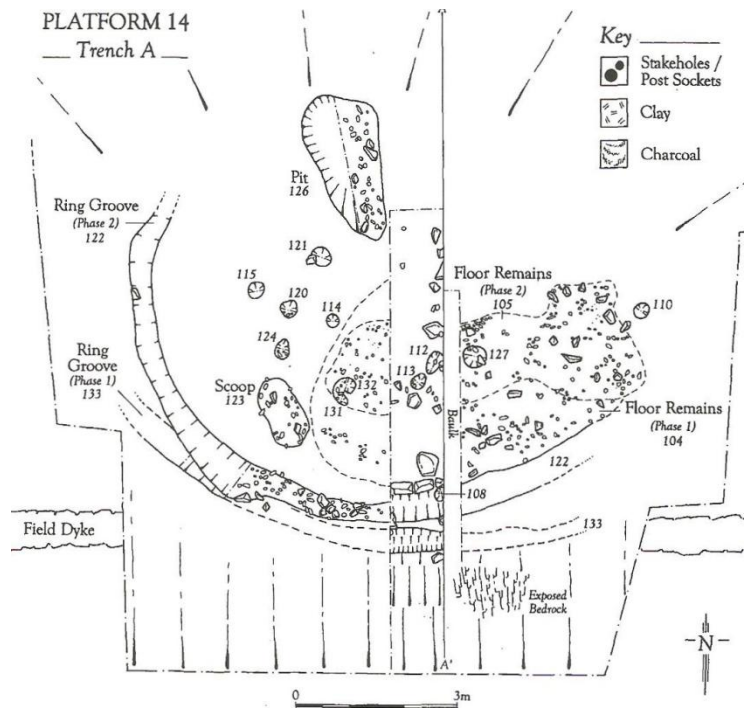


Figure 6.48a: Lintshie Gutter, plan of platform 14 (from Terry 1995, 376)

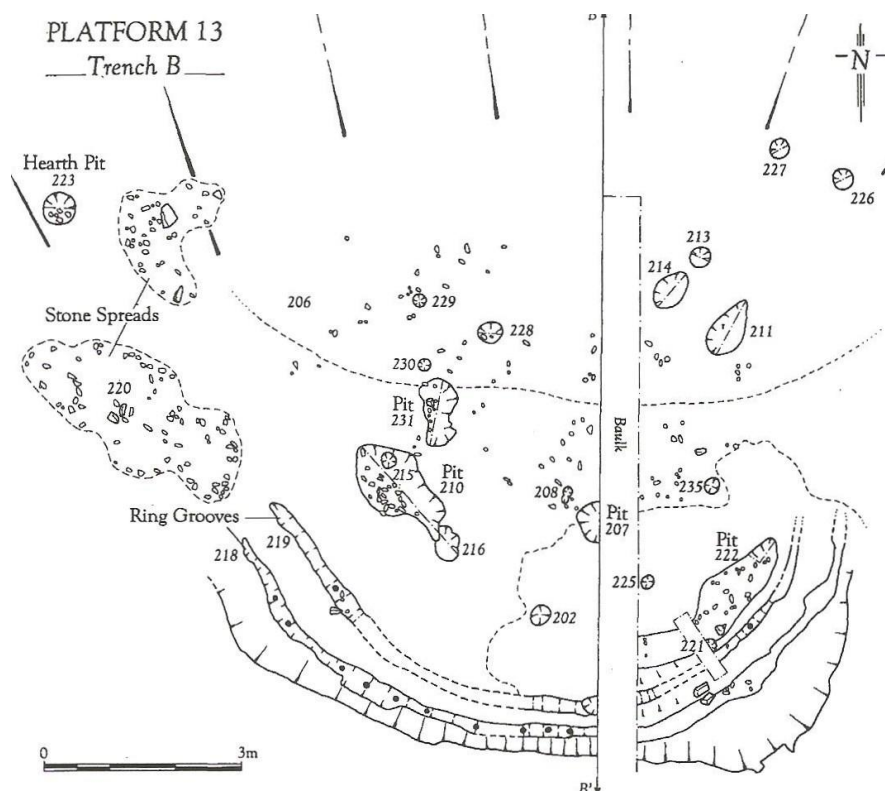


Figure 6.49a: Lintshie Gutter, plan of platform 13 (from Terry 1995, 378)

Platform 1 (Figure 6.50a) was found by itself between the clusters of platforms. It was determined that the roofless structure built here – an oval, stone-built enclosure surrounded by a ditch – was not a house, but most likely a byre (Terry 1995: 379). The floor was made of compressed, re-deposited material, and a pit near the back of the platform contained lithics and charcoal (Terry 1995: 380). The charcoal (alder, birch, and hazel) was dated to 1410 ± 120 uncal BC (1960-1410 BC, calibrated at 2 sigma) (Terry 1995: 423).

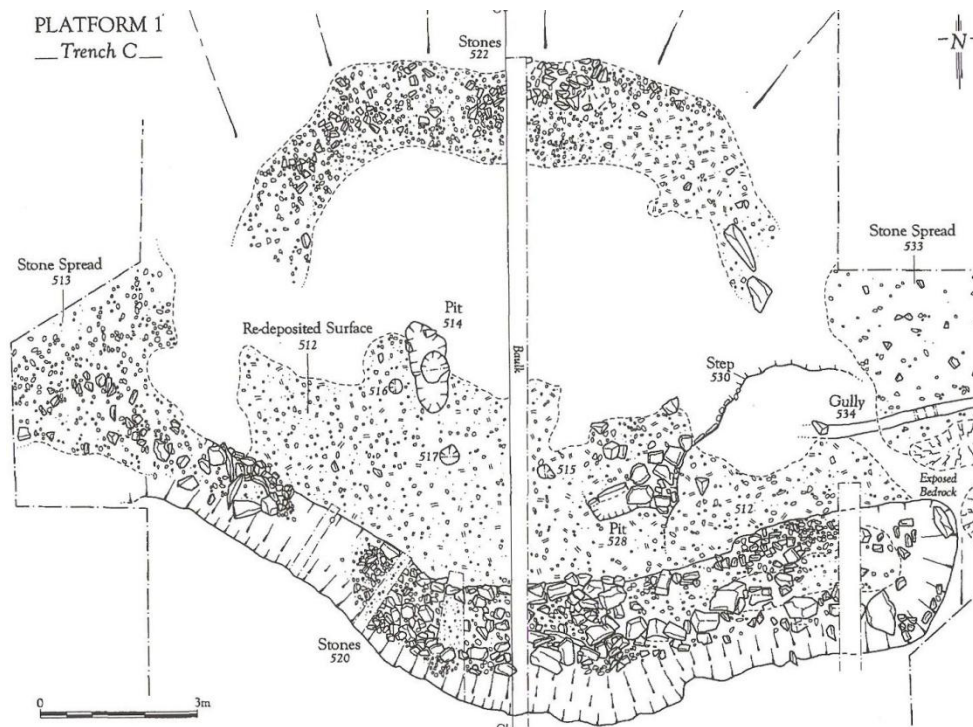


Figure 6.50a: Lintshie Gutter, plan of platform 1 (from Terry 1995, 381)

The third cluster encompassed eight platforms, of which four were excavated. Platform 5 was the deepest cut of the platforms and was thus the best preserved (Figure 6.51a) (Terry 1995: 382). The rear cut measured 2.5 m high and the structural remains were visible in the charred areas of the ring-groove. Burnt daub was found in these areas and a date from the birch charcoal was determined at 1480 ± 90 uncal BC (2011-1520 cal BC) (Terry 1995: 423). A circular arrangement of post-holes in the centre of the structure (some of which had been replaced up to three times) denoted a roof support and an occupational layer, including oven 'rakings' and pot sherds, and hearth pit supported that it had been a domestic structure. Of great interest was an oven found at the back of the house (Terry 1995: 384). It consisted of a pit with a firing channel and a flue. The oven fill was charcoal-rich and burnt clay surrounded its edges. Terry (1995: 385) stresses that this oven is unlike any others known from the period – it is thought to have been for cooking rather than firing pottery or metal as no pot wasters or

metallurgical material was found in the structure, whilst charred barley grains and a saddle quern were found in association with the oven. A radiocarbon determination from the hazel and birch charcoal of the oven dated to 1250±50 uncal BC (1609-1410 cal BC), which suggests a long use-life for the house.

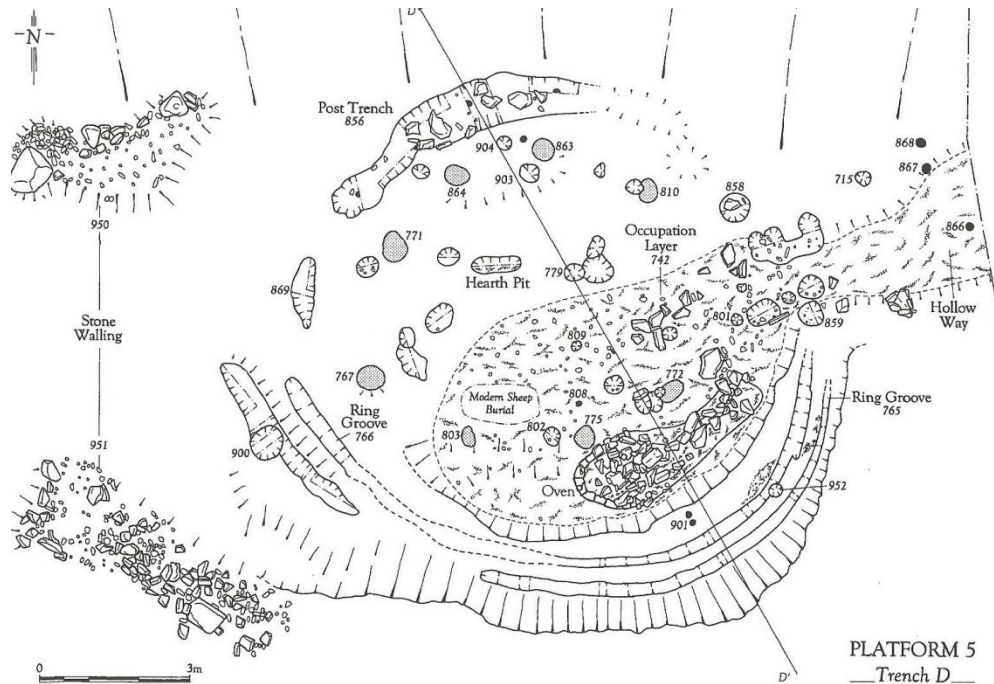


Figure 6.51a: Lintshie Gutter, plan of platform 5 (from Terry 1995, 383)

Platform 6 was confirmed as an archaeological structure, but was not excavated.

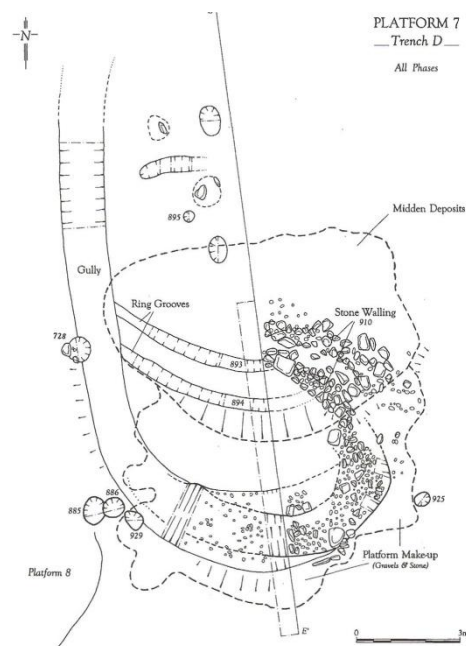


Figure 6.52a: Lintshie Gutter, plan of platform 7 (from Terry 1995, 387)

Platform 7 (Figure 6.52a) again demonstrated more than one phase of construction (Terry 1995: 386). The first use of the platform comprised two superimposed ring-grooves. A gully was then cut into the west side of these, and then the rear part of the platform was used as a midden, perhaps by the inhabitants of platforms 5 and 8, since the ceramics found in all three bear similar fabric (Terry 1995: 388). In the final phase, a stone wall was built just in front of the midden to support the terrace cut, and hence, the apron above of Platform 8. Since Platforms 7 and 8 are so closely associated and 8

clearly post-dates 7, the contents of Platform 8 were of utmost importance.

Platform 8 was excavated on its eastern portion only due to time constraints (Figure 6.53a) (Terry 1995: 389). Its primary ring-groove at the back of the platform and contained large quantities of burnt clay and charcoal, suggesting the structure had burnt down. Hazel charcoal from this burning were radiocarbon dated to 1980 ± 60 uncal BC (2580-2280 cal BC) (Terry 1995: 423). This surprisingly early date, and thus earlier date for Platform 7, denotes a long use of this area for settlement that stretches well into the Late Neolithic. A second, larger ring-groove had been built on top of this, which encased an occupational layer, post-holes, pits that contained pottery and charcoal flecks, and three hearths, one of which was stone-lined and contained burnt bone and scorched sherds (Terry 1995: 390-391). This phase, however, was not dated.

Further work was not within the scheduled plan for the rescue operation; however, this site is important in the understanding of life during the Late Neolithic/Early Bronze Age transition where our data is more funerary-focused. The very fact that the settlement yielded dates to the Late

Neolithic suggests that other unenclosed platform settlements (which have few dates) may have earlier origins than has been assumed. Exploration of this could alleviate the imbalance in the types of data we have for the period.

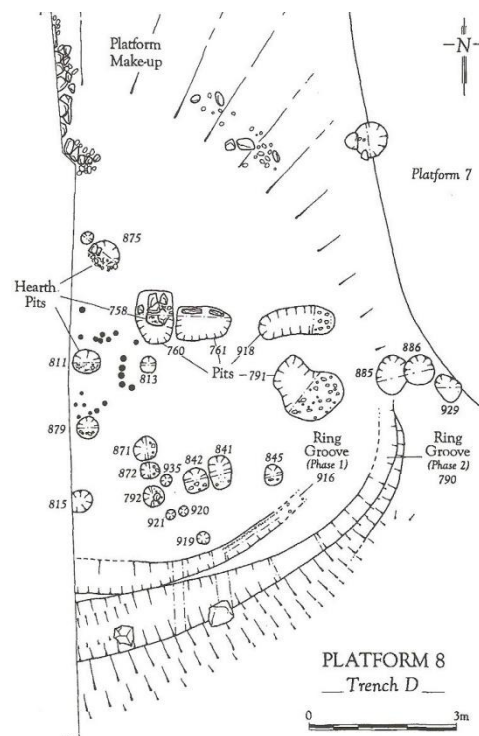


Figure 6.53a: Lintshie Gutter, plan of platform 8 (from Terry 1995, 390)

30. Green Knowe, Peeblesshire

In 1977-8, excavations of the unenclosed platform settlement at Green Knowe were undertaken to better understand this type of site (Jobey 1978-80: 72). Previous excavation had uncovered only flat-rimmed ware in the very upper levels, but Jobey was certain that the

site had greater antiquity based on his findings elsewhere. The site consisted of nine platforms with field banks, built at 275 m OD – three of these, platforms 2, 5 and 8 were selected for excavation (Figure 6.54a) (Jobey 1978-80: 73-6).

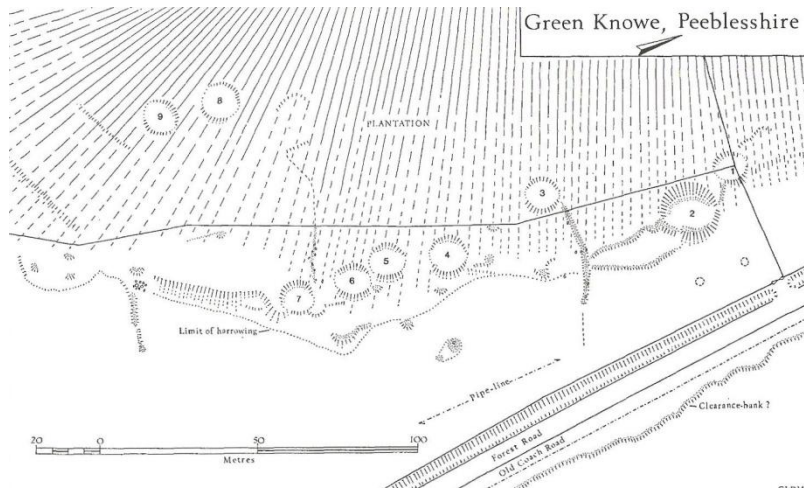


Figure 6.54a: Green Knowe, site plan (from Jobey 1978-80, 75)

Platform 2 (Figure 6.55a) had been site to three successive houses (Jobey 1978-80: 78). The first house was 8.5 m in diameter and had a south-facing doorway. It is likely it was a wattle-and-daub construction. The second house was visible from its wall-groove, cut into the ground where the wattle-and-daub walls would have been set. This house was bigger at 10 m in diameter and a second entrance to the west had a cobblestone path and porch. It is thought this house eventually burnt down as pieces of burnt daub were found in the ring-groove; a radiocarbon date 1285 ± 112 bc was obtained from burnt wattle (Jobey 1978-80: 80). The third house was the same size across, but was a larger, bulkier construction. A cobblestone path was put into the southeastern entrance and a refuse area just

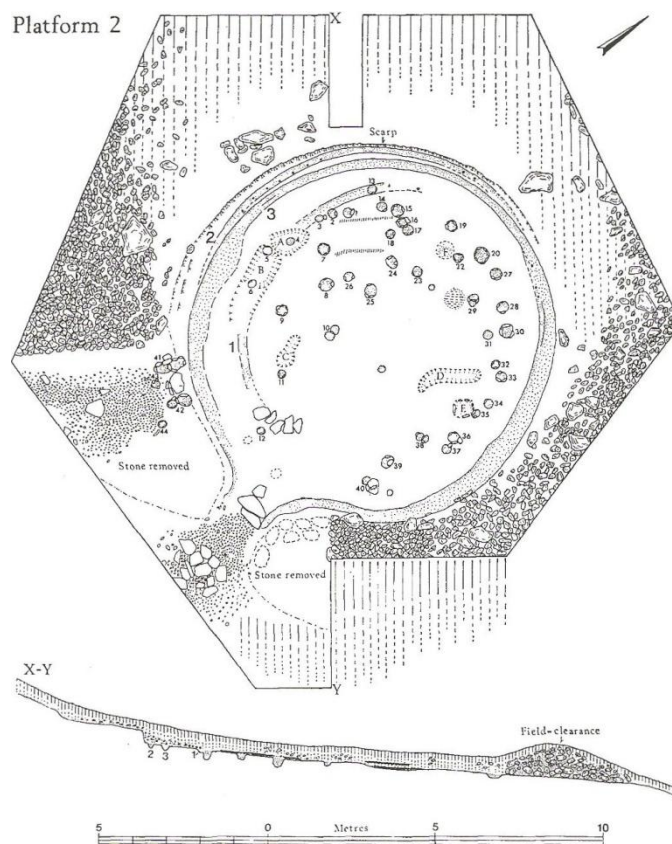


Figure 6.55a: Green Knowe, plan of platform 2 (from Jobey 1978-80, 77)

construction. A cobblestone path was put into the southeastern entrance and a refuse area just

to the left of this door contained charcoal and potsherds mixed with clearance stones (Jobey 1978-80: 79). Radiocarbon determinations from house 3 and the clearance midden were calculated to be: 1226 ± 112 bc and 1208 ± 112 bc (Jobey 1978-80: 80). Inside the houses, postholes and two superimposed floors were uncovered, but there was no way to tell which features belonged to which house. Some of the posts had burnt *in situ* and so it is thought they were part of the second house, but no alignment could be discerned (Jobey 1978-80: 80).

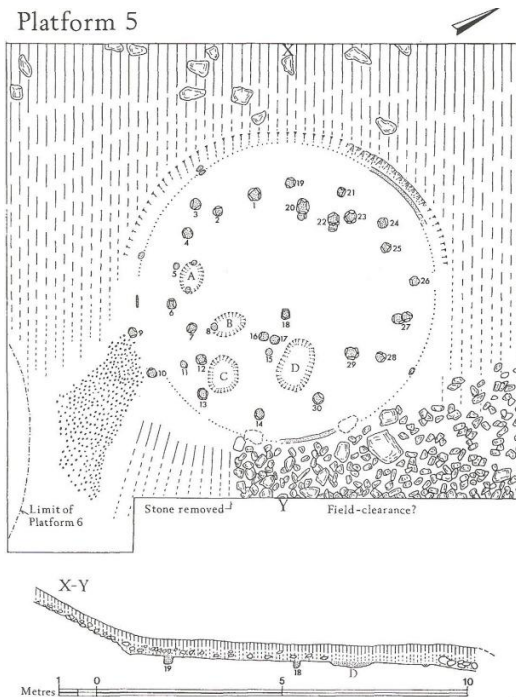


Figure 6.56a: Green Knowe, plan of platform 5 (from Jobey 1978-80, 81)

Platform 5 (Figure 6.56a) was less well-preserved with only two arcs of the original wall-groove remaining, along with several slots for the wattle (Jobey 1978-80: 80). The house had been 7.7 m in diameter, and 30 postholes (many that were replaced over time) were spread across the surface. Four internal pits and a hearth with reddened slab lining were also in the house interior (Jobey 1978-80: 82). Flat-rimmed ware sherds were found in the house near the floor surface, and stone rubbers, pounders and a saddle quern were uncovered from a clearance area on the apron of the platform. Burnt wood at the back of the wall-groove was radiocarbon dated to 1568 ± 112 bc.

Platform 8 was the least preserved and consisted only of a thin, greasy occupation layer. One sherd, stone rubbers and pounders and an amber bead were uncovered from the house floor and burnt wood from a posthole in the house was dated to 956 ± 112 bc.

31. Broughton Knowe, Peeblesshire

At 305 m OD on Broughton Knowe, there are ringed enclosures. Near these lay a round barrow, 5.5 m in diameter, which was composed of stone, sand and soil (MacLaren 1966-7: 99). It is its proximity to the ringed enclosures that initially drew the attention of the Royal Commission and it was excavated in 1962.

The barrow was found to have been made of a loose matrix of soil, sand and stone, but the surface of the monument was covered in a harder layer that was more difficult to excavate (MacLaren 1966-7: 101). Although the centre of the barrow was heavily disturbed, a pit was discernable in the centre and the remains of a cremation that had been put on the old ground surface were found. This burial was accompanied by a few sherds and flints, as well as cremated bone and five flint scrapers. MacLaren notes (1966-7: 101) that the wear on the sherds suggests that they were placed (whether deliberately or not) with the cremation in pieces, rather than as a whole pot.

32. Meldon Bridge, Peeblesshire

See section: Late Neolithic – Impressed Ware, #5.

33. Harehope Cairn, Peeblesshire

See section: Late Neolithic/Early Bronze Age – Beaker, #39.

34. Monklaw, Jedburgh, Roxburghshire

Two Collared Urns are recorded as having been found in a field, 11 m apart, at an elevation of 152 m OD (Edwards 1934: 79). Both were inverted, but one had been broken and remained only as a few body sherds. The other contained a cremation of a mature adult with a gracile stature.

35. The Kip, Falla Cairn, Oxnam, Roxburghshire

Falla cairn measured 21 m in diameter and 1.5 m high (Steer 1946-7: 183). When it was excavated in 1928, a cist was found just off-centre near the old ground surface. It contained some cremated bone, hazelnuts and beechnuts, but an iron plate denoted a previous opening in historical times. On the old ground surface and into a pit, however, a second, undiscovered cremation burial was found with sherds of a Collared Urn.

36. Teindside, Teviotdale, Roxburghshire

On a steep elevation overlooking the River Teviot, a group of cists were found during ploughing in 1868. These were excavated by the Hon. Lord Rosehill and were described to be a group of four cists, set in an arc around a central burial. Cist 1 was the only one which contained human remains - the flexed inhumation of a male (Rosehill 1868-9: 136-7), whilst cist 2 was filled with burnt animal bone, a sherd of pottery, and a flint flake (Rosehill 1868-9: 137). Cist 3 held only one small piece of flint, and cist 4 contained charcoal, flint flakes, and a flint nodule (Rosehill 1868-9: 138). What is interesting about this site is that Rosehill seems to have discovered the funeral pyre associated with the cists. In the centre of the arc, he dug down and found a floor of stone slabs, 7 x 3 feet, covered with a, "...thick layer of stones and gravel, still much mixed with charcoal" (Rosehill 1868-9: 138). On this were fire-cracked rocks, human bones and teeth, many pot sherds, and partially burnt human leg bones. Assuming this account is accurate, this is one of only two examples of a Bronze Age funeral pyre in the literature of the study area.

37. Monteviot, Jedburgh, Roxburghshire

In a note of donation by Most Hon. The Marquess of Lothian, C. H., a Collared Urn is recorded (Meeting Minutes 1937-8). It was found by Dr. Phene in 1871 near Monteviot and is missing its base.

38. Dunion Hill, Jedburgh, Roxburghshire

In a letter to the Society of Antiquaries of Scotland, Mr. A. S. Forrest, a sergeant of the Jedburgh Company, writes that in October of 1885, he and two other sergeants were returning from the firing range on Dunion Hill, when they were met by a local farmer (Anderson 1886: 98). Forrest was presented with a Collared Urn that had been found during ploughing on the northern slope of the hill. It was discovered inverted over the cremated remains of a child, and lying on a stone slab in a pit. Anderson (1886: 99) notes that the Collared Urn is particularly well-made, and has a unique relief of chevrons on the rim.

39. Chesters, Ancrum Moor, Roxburghshire

In a note of a loan to the National Museum of Scotland, Black (1893-4: 332) mentions the rim of a large cinerary urn that was found on Ancrum Moor. It is thought that this report correlates to the Collared Urn examined at the Hawick Museum that is catalogued to a provenance of Chesters, Ancrum, Roxburghshire.

40. Longcroft, Lauderdale, Berwickshire

See section: Late Neolithic/Early Bronze Age – Food Vessels, #32.

41. Lintlaw, Bunkle & Preston, Berwickshire

See section: Early/Middle Bronze Age – Vase Urns, #2.

42. Spottiswood, Berwickshire

On an uncultivated area on Clacharie, an untouched cairn was dug in 1863, revealing three cists in its interior (Simpson 1862-4: 222). The first cist was full of black ash, charred wood, and bones (a cremation burial); whilst the second was filled with gravel and a Collared Urn inverted over a cremation. It had a circle of stones around the cist (Simpson 1862-4: 223). Just under a meter away, a third cist was uncovered and found to be full of ashes and bone. Interestingly, Simpson (1862-4: 223) records that around all of these cists was a “wall of stones” in an egg shape, which is interpreted here as a smaller cairn that was later enhanced and made bigger. Within the rubble of the cairn, burnt sherds and pyre material were found.

On a knoll, 17 m from the cairn, lay a second one that Simpson also dug. Inside, he found another cist that was built on top of a large burnt area, 1.5 m thick and 12 m long. From the shape and size of this second site, as well as the internal divisions Simpson (1862-4: 223) notes, it would seem that this is a long cairn, much like others known in the region and Northumberland. However, the density of burnt material suggests it may have been used as a pyre.

43. Oldcambus Townhead, Cockburnspath, Berwickshire

In a note regarding finds in Cockburnspath, three Collared Urns are mentioned. The first was found in 1825 under some stones whilst ploughing near Bankhouse (Hardy 1857: 105). The second near Penmanshiel Wood near a cairn in 1830, and the third in 1844 at ‘Aldcambus Townhead’ near a “fortified circlet” (presumably an Iron Age hillfort) (Hardy 1857: 105). All were found inverted over possible cremations.

44. Hoprig, Cockburnspath, Berwickshire

See section: Late Neolithic/Early Bronze Age – Beaker, #51.

45. Berwickshire?

In the list of donations to the Museum of Scotland in 1920-1 (*PSAS* 55: 21), two Collared Urns of unknown provenance are included.

46. Ford, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #61.

47. Etal Moor, Northumberland

Recorded as Greenwell’s Barrow 184, this mound was located on a ridge and measured 4.9 m across and 0.7 m high (Greenwell 1877: 403). A beaker had once been buried in the upmost layer in the centre of the mound, but the monument had been used as a station point by Ordnance Surveyors and the post had shattered it so that only sherds remained. To the east of this, Greenwell (1877: 404) records a pit where a Collared Urn was found containing a cremation, and under this was a larger pit with a second Collared Urn holding a cremation burial. To the side of these two urns was found a small pot with a slab of stone, like those found in cists, on its other side. Greenwell (1877: 405) concludes that these two pots must be connected. A further 0.45 m from this, a Collared Urn with a cremation inside and an ‘incense cup’ associated with it was found. Supporting the Early/Middle Bronze Age context

of the barrow, a flint flake and flat stone rubber were found in the monument's makeup (Greenwell 1877: 406).

48. Whitton Hill, Milfield, Northumberland

See section: Late Neolithic – Tyne-Forth Regional Ware ceramics, #4.

49. Milfield, Northumberland

A Collared Urn provenance to Milfield was examined at the Great North Museum, but no publication could be found that mentions this vessel.

50. Tom Tantallon's Grave, Kirknewton, Wooler, Northumberland

In 1857, Tate opened a cairn at Wooler that had traces of an inhumation in the primary burial. A Collared Urn was also found in the cairn (Kinnes & Longworth 1985: 138).

51. Doddington Moor, Northumberland

In 1858, Greenwell opened a barrow at Doddington (Kinnes & Longworth 1985: 134). Five graves were found, four of them with Collared Urn sherds and the fifth had sherds from a Bronze Age vessel that could not be classified.

52. Broomhill, Northumberland

Greenwell (1877: 408-410) records a further two barrows that were opened on Broomhill – Barrows 187 and 188. The first was 4.9 m wide and 0.9 m high and made by a ring of stones setting out the perimeter and then rubble mounded overtop (Greenwell 1877: 408). A cist in the centre, set on the old ground surface, held the skull fragments of a child and a Food Vessel sat upright beside the inhumation. Around this cist, six more cremation burials were found in urns set in pits. A flat stone had been placed on top of each and all but one were upright. The inverted Collared Urn contained a cremation of a young adult, a flint flake and a

bone pin fragment, and was packed with clay at its opening to keep the contents in place (Greenwell 1877: 409).

The second barrow, Barrow 188, lay 114 m from 187, and was made of the same material, albeit without the circular stone setting underneath (Greenwell 1877: 410). On the natural surface under the monument, the soil was burnt and a deposit of charcoal, burnt bone, and unburnt pottery sherds, flint and a spearhead, were compacted into the earth. Although this may have been a pyre later covered by a mound, Greenwell (1877: 410) admits it is very unusual and unlike any mound he had opened. He states that there are no signs of later disturbance and this seems to have been a single-event site.

53. Rosebrough, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #67.

54. West Lilburn, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #69.

55. Kirkhill, West Hepple, Northumberland

Located in the Upper Teudian Fell Sandstones and overlooking the River Coquet as far as Rothbury, urn burials have been discovered by antiquarians since 1821 (Miket 1974: 153). During the excavation of a stone chapel in 1972, two pits were found that contained Bronze Age remains. Pit A, an ovoid measuring 0.71 x 0.59 m to a depth of 0.63 m, contained an inverted Collared Urn and several worked flints (Miket 1974: 159). It lay on a burnt sandstone slab and encased the cremated remains of three adults and a child. Pit B was circular with a diameter of 1.25 m and revealed *in situ* burning, and the fill was much the same as Pit A, although it was otherwise empty.

A burial was also found on site in a grave cut into the bedrock. The flexed skeleton of an individual lay in a surrounding matrix of soil and charcoal flecks and a bronze awl was found

near the person's spine (Miket 1974: 160). A later burial of four children, associated with the 12th century chapel, was directly above this, but had not disturbed the prehistoric remains.

56. Howick Heugh, Northumberland

See section: Late Neolithic/Early Bronze Age – Food Vessels, #60.

57. Standrop Rigg, Northumberland

Built on the slope of Great Standrop in the Cheviot Hills, the Standrop Rigg site was first discovered during an Ordnance Survey and then excavated by George Jobey in the 1980s (Figure 6.57a) (Jobey 1983: 1). At 380 m OD, two unenclosed settlements of five to six roundhouses set on platforms were recorded with associated clearance cairns (Jobey 1983: 4). For the excavation in 1983, two of these houses were investigated. Both were represented by ring-banks on their perimeters and were covered by grey silt. A radiocarbon date from charcoal mixed with this grey silt in House 2 was determined at $410\pm70\text{bc}$ and in a pit in House 4, at $350\pm70\text{bc}$ (Jobey 1983: 6, 10). Underneath this layer, the features of each house were much clearer.

House 2 (Figure 6.58a) had a floor with stakeholes around the perimeter, suggesting a wattle-and-daub construction, and postholes in the centre, indicating a roof support (Jobey 1983: 6). A burnt patch on the floor was interpreted as a hearth and a shallow pit with soil and charcoal flecks in the house's interior. In the floor packing, sherds of pottery, were found, and the pieces of two saddle querns and hand rubbers were found in the stone ring-bank (Jobey 1983: 7). A radiocarbon date was obtained from posthole 3, that had a fill of hazel and willow, indicating a date of $1050\pm80\text{bc}$.

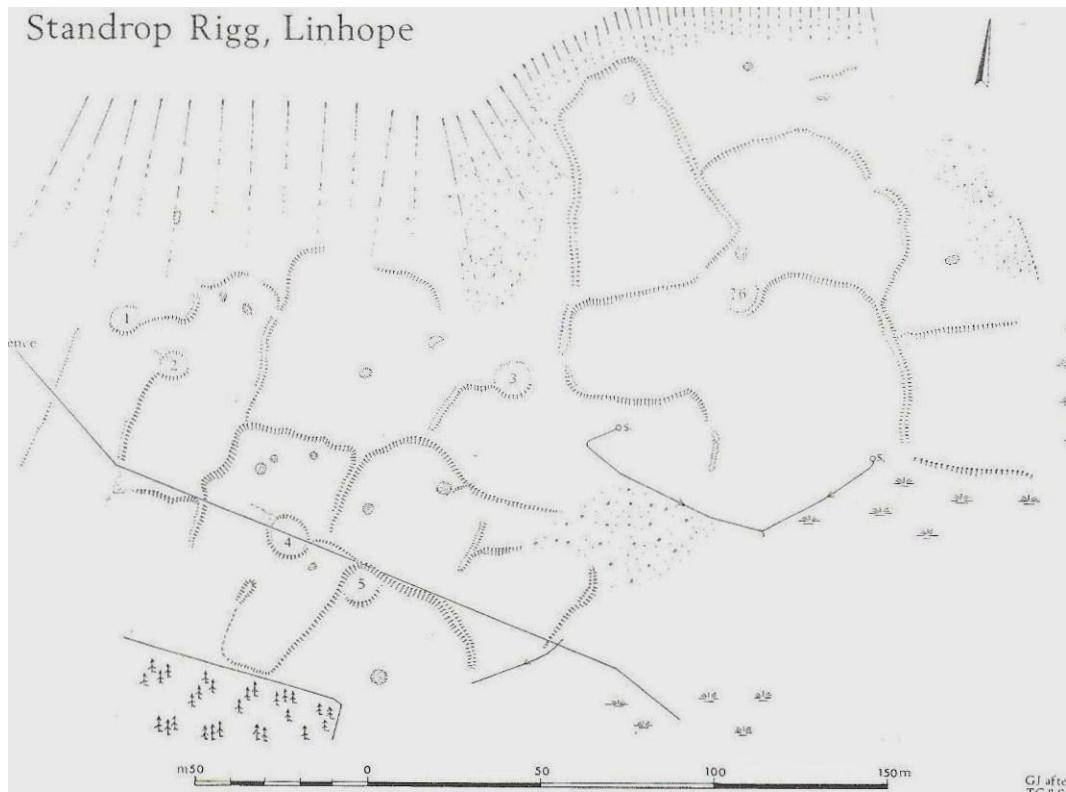


Figure 6.57a: Standrop Rigg, site plan (from Jobey 1983, 3)



Figure 6.58a: Standrop Rigg, plan of house 2 (from Jobey 1983, 5)

House 4's ring-bank was much more discernable in shape and size and was measured to be 8.5-9 m in diameter (Figure 6.59a) (Jobey 1983: 7). Under the silty layer, 12 stakeholes on one side and a further 25 on the other formed the perimeter of a house that would have measured 7.75 m in diameter. Postholes and postpipes inside and in settings at one side of the house indicated roof supports, as well as a succession of doorways and an off-centre hearth was visible inside the structure (Jobey 1983: 9). Two pits were also discovered inside the house; the first, Pit A, was shelved and contained hazel charcoal that dated to 2070±80bc (Jobey 1983: 10). The second, Pit B, was bowl-shaped and contained only the silt that was found on top of both houses. Sherds of pottery, matching those found in the floor of House 2, were also recovered from House 4.

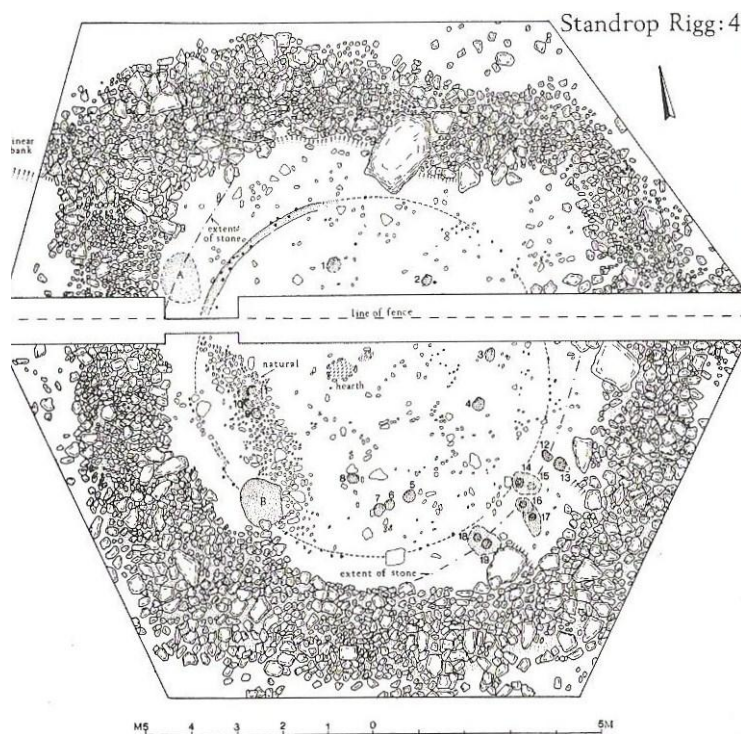


Figure 6.59a: Standrop Rigg, plan of house 4 (from Jobey 1983, 8)

58. Broomridge, Northumberland

In his note about Broomhill, Greenwell mentions other burials he found, "...many years ago at Broomridge" (Greenwell & Rolleston 1877: 408). He describes that a Collared Urn sat upright in a clay-lined pit with cremated remains inside and a second urn was inverted over the remains inside the vessel. Also nearby was a second cremation burial associated with an incense cup.

59. Ingram Hill, Northumberland

Lying at 168 m OD, the enclosure at Ingram Hill, in Northumberland, was tested in 1939, and then excavated in 1948 (Hogg 1956: 150). The enclosure, measuring 49 m in diameter, was determined to have been built during the Iron Age, as it contained rectangular houses, an enclosing stone wall and Roman pottery (Hogg 1956: 151-158). However, under this settlement, and particularly under the enclosing wall on both sides, was a gray, greasy deposit, separated by a 30 cm sterile horizon (Hogg 1956: 155). This contained large quantities of charcoal and pottery from the Bronze Age.

60. Harehope Hill, Eglingham, Northumberland

See section: Late Neolithic/Early Bronze Age – Food Vessels, #57.

61. Green Leighton, Hartburn, Northumberland

A robbed barrow (212), measuring 6 m in diameter, was examined by Greenwell (1877: 434). He found a pot set on the limestone bedrock under the cairn with no apparent associations.

62. Scrainwood, Alnwick, Northumberland

Longworth (1984) lists this vessel as lost, but it is at the Great North Museum. It was found sometime in the 1870s or 1880s in a quarry by workmen. No associations were recorded, except that it was in a cist (Dixon 1882-4: 544-5).

63. High Knowes, Alnham, Northumberland

On a flat area at High Knowes, there are two cairnfields, 'A', which consists of 22 cairns, and 'B', set at 300 m OD (Jobey & Tait 1966: 23). There are also six ditched enclosures, each about 6 m in diameter. Of these, two cairns and two ditched enclosures were excavated. The first three of these were located in cairnfield A, whilst the second ditched enclosure was found in cairnfield B (Figure 6.60a).

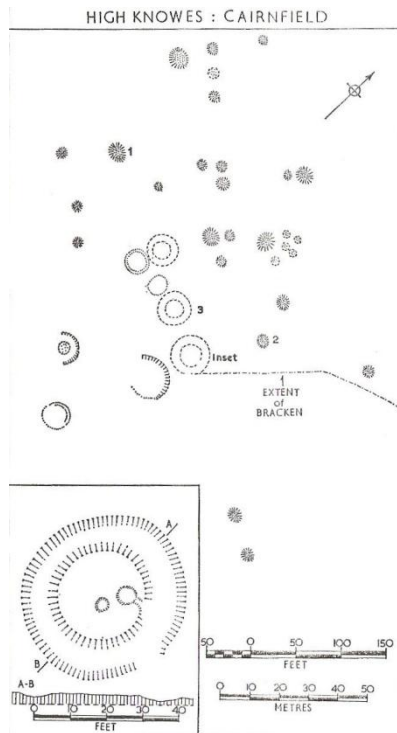


Figure 6.60a: High Knowes, site plan (from Jobey & Tait 1966, 24)

Cairn 1 (Figure 6.61a) was kerbed and had four upright stones in its construction. Incorporated into the fill material were pieces of burnt wood, flint flakes, bone, and a bronze ring-headed pin (Jobey & Tait 1966: 26). Since the charcoal and burnt bone did not extend to the bottom of the fill or below the kerbstones, it is thought that the cremation took place within the perimeter of the kerb (Jobey & Tait 1966: 28).

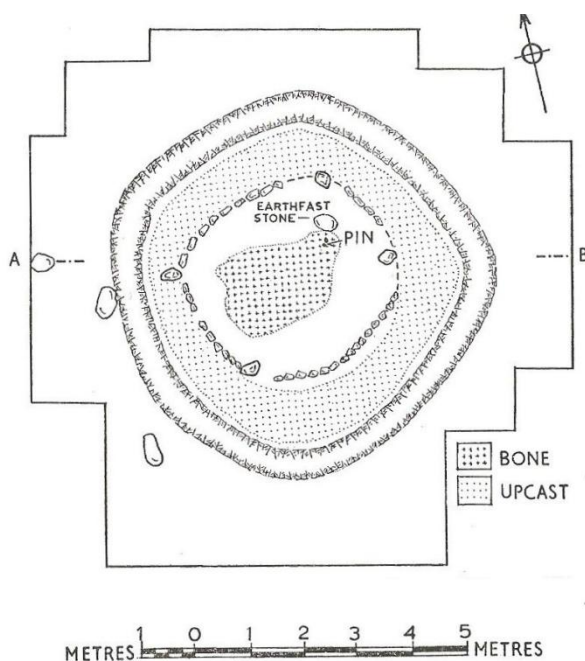


Figure 6.61a: High Knowes, plan of cairn (from Jobey & Tait 1966, 25)

Cairn 2 had no encircling features; however, a grave within the cairn had two sherds of a Beaker, a small scraper, a barbed-and-tanged arrowhead and eight flint spalls (Jobey & Tait 1966: 33).

Burial 3, one of the ditched enclosures, yielded no burials, but only a few bits of charcoal, a scraper and a piece of jet from the very bottom of the fill (Jobey & Tait 1966: 37).

Finally, burial 4, a ditched enclosure in cairnfield B, had two pits in the centre, each with cremated remains, charcoal, flints and sherds, most likely those of Collared Urn (Jobey & Tait 1966: 43-4). Roman and Iron Age ceramic sherds were also found in a hollow in the top part of the cairn, demonstrating later disturbance to the site (Jobey & Tait 1966: 45).

64. Warksworth, near Wark, Northumberland

See section: Late Neolithic/Early Bronze Age – Food Vessels, #67.

65. Catcherside, Kirkwhelpingham, Northumberland

In a barrow (211) that had been robbed out to build a wall, a pit as found dug into the natural surface that contained an inverted urn with a slab on top and a cremation inside (Greenwell 1877: 434). Three stones were placed around the urn to keep it from harm.

66. Broomhouses, Ovingham, Northumberland

Four cists were found in a field where deep ploughing had been done for some time (Greenwell 1877: 437). Greenwell (1877: 437) states that if any mound had been there, it would have been destroyed by this agricultural practice. The first cist was set into the natural surface and contained only a few pieces of charcoal, whilst the second held an inverted Collared Urn and the cremation burial of an adult with stones packed around it and a flint knife (Greenwell 1877: 437). The third cist also had an inverted Collared Urn with a whinstone boulder set on top of it and the cremation burial of an adult was held within (Greenwell 1877: 438). Finally, the fourth cist was set into the old ground surface and contained the cremated remains of a young adult.

67. Rye Hill, Hexham, Northumberland

This Collared Urn was examined at the Great North Museum and has an acquisition number dating to 1889. No mention of it could be found in the literature.

68. Birkside Fell, Hexham, Northumberland

This Collared Urn was examined at the Great North Museum as well and it also could not be found in the literature.

69. Low Moralee Farm, Haydon Bridge, Northumberland

In 1923, Parker Brewis donated an incense cup to the Museum of Antiquities that had been found on the Ridley Hall estate at Low Morralee Farm, probably by Col. Spain (Cowen 1966: 228). It was noted that an inhumation with a bronze knife and a cremation burial under an inverted Collared Urn were also found on the farm. Under the Collared urn, the cremation was accompanied by a miniature Collared Urn and an incense cup (Cowen 1966: 231).

Cordoned and Bucket Urns (Map 6.8)

1. Eweford, East Lothian

See section: Late Neolithic – Grooved Ware, #3.

2. Pinkie Mains, Musselburgh, Midlothian

In January 1947, whilst putting in new drains, a Cordoned Urn was ‘hit’ (Calder 1946-7: 177). It is noted that there were large, water-weathered boulders around it.

3. Kirkpark, Musselburgh, Midlothian

See section: Late Neolithic/Early Bronze Age – Food Vessels, #3.

4. Ford, Midlothian

A context for this find could not be located in the literature or on the Canmore website.

5. Kipps, Torphichen, West Lothian

Found in a cist whilst digging sand for the foundation of a building, this ‘extremely rude’ Cordoned Urn lay inside, associated with bones (Duns 1877: 405-11).

6. Sheriffflats, Thankerton, Lanarkshire

See section: Late Neolithic/Early Bronze Age – Food Vessels, #18.

7. Drumelzier, Peeblesshire

See section: Late Neolithic/Early Bronze Age – Beaker, #38.

8. Meldon Bridge, Peeblesshire

See section: Late Neolithic – Impressed Ware, #5

Early Bronze Age /Middle Bronze Age – Accessory Vessels (Map 6.9)

1. Traprain Law, East Lothian

See section: Early/Middle Bronze Age – Collared Urns, #5.

2. Kirkpark, Musselburgh, Midlothian

See section: Late Neolithic/Early Bronze Age – Food Vessels, #3.

3. Dunbar, East Lothian

On the Canmore website this vessel is recorded by Wilson (1863); however, reference to it could not be found in the publication.

4. Sheriffflats, Thankerton, Lanarkshire

See section: Late Neolithic/Early Bronze Age – Food Vessels, #18.

5. Etal Moor, Northumberland

In barrow 184, Greenwell found five graves with Collared Urns. All were found upright and all but two contained cremated bones. One also held an accessory vessel (Greenwell & Rolleston 1877: 403-6).

6. Lilburn Hill, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #68.

7. West Lilburn, Northumberland

See section: Late Neolithic/Early Bronze Age – Beaker, #69.

8. Belsay, Northumberland

This vessel is listed by both Longworth (1984) and Gibson (1978), but no provenance is known.

9. Rothbury, Northumberland

See section: Late Neolithic/Early Bronze Age – Food Vessels, #53.

10. Murton High Crag, Northumberland

See section: Late Neolithic/Early Bronze Age – Food Vessels, #42

11. Low Moralee Farm, Haydon Bridge, Northumberland

See section: Early/Middle Bronze Age – Collared Urns, #69.

APPENDIX 2: IMPRESSED WARE*

1. Hedderwick, Dunbar, East Lothian

Most of the pottery from Hedderwick is listed in the catalogue as 'Neolithic B' pottery and much of this fits into the Impressed Ware tradition. Each sherd here is considered to be from a separate pot, based on fabric, wall thickness and surface treatment, but there will be a margin of error in this since hand-built, open-fired pottery can be more variable across the expanse of the vessel than wheel-thrown, kiln-fired ceramics. Many of these were not photographed, due to technical difficulties on the day they were examined; however, each was sketched roughly. The sherds that were examined are: NMS X.BM 25-19, BM 32-39, BM 47-50, BM 52-57, BM 60, BM 583-586, BM 590 and BM 595 (which is listed as Grooved Ware, but comes from the mixed Western Pit deposit and bears more characteristics in common with the rest of the Impressed Ware on-site than it does with the Grooved Ware examples). Where discernable, it is indicated which substyle the vessel belongs to, but most examples are too fragmentary to determine this level of detail.



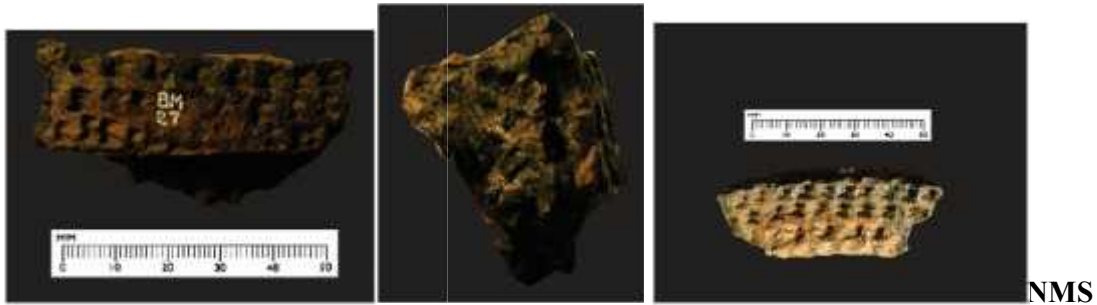
NMS X.BM 25

BM 25 is a small rim fragment from a pot with a slightly insloping rim, leading to walls that slope inward towards the base in a vase shaped profile (photo 2) – following characteristics of the Meldoun Bridge bowls. The rim overhangs the walls on the inside and the walls are 10.3 mm thick. The fabric is clay-rich with evenly-spaced light gray, subangular lithic inclusions

that are 7 mm wide and dark gray, angular lithics that are 2-3 mm wide. The vessel was slipped and it is reddish/brown on the outside, black on the inner surface and in the core. Whipped cord maggots ornament the rim top (photo 3) and on the rim edge and there are T-shaped impressions on the wall under the rim that seem to have been made with a stick of that shape (photo 1). This sherd represents less than 1 % of the original vessel.



BM 26 has a flattened rim top that overhangs the straight walls on the inside (photo 2). It is 10.6 mm thick and has a clay-rich fabric with light gray, subangular lithics that are 3-5 mm wide. Although this is obviously a different pot, the fabric of this vessel is the same as BM 25. It is also slipped and has a black/brown exterior, a red/brown interior and the core is dark gray. The decoration consists of a row of horseshoe-shaped birdbone impressions on the rim top and on the outside wall under the rim (photos 3, 4). Less than 1 % of the vessel survives.



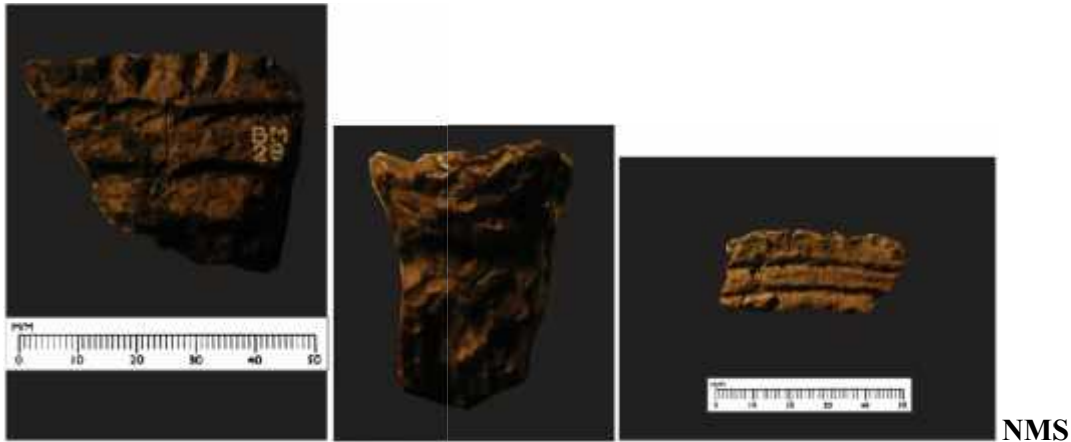
X.BM 27

BM 27 is a rim fragment from a vessel with a bevelled rim top, inturning moulded collar and then straightish walls (photo 2), typical of the Fengate substyle. The fabric is, again, the same as BM 25 and BM 26, although this is definitely a different vessel, and it is medium brown with blackening towards the rim on the outside and has a black core. The decoration on this pot was done with an instrument with a double-pointed end that was pressed into the rim top, inside the rim, on the rim edge and on the wall of the pot in rows (photo 1, 3). This fragment is less than 1 % of the original vessel.



X.BM 28

BM 28 has an insloping rim with a wide rim edge (but not a collar, as such) and straight walls (photo 2). It is 10.8 mm thick and has a clay-rich fabric with evenly-spaced lithic inclusions. Gravel, including calcite flecks, appears natural to the clay, but white, subangular lithic material that is 3-4 mm wide was deliberately added. The vessel was slipped and it is medium brown in colour on all surfaces. Rows of fine twisted cord (1.5 mm strand) ornaments the rim top (photo 3) and there is a row of diagonal cord lines on the rim edge that attach to vertical lines on the body (photo 1). Only about 1 % of the original vessel survives.



X.BM 29

BM 29 is a rim fragment from a vessel with a slightly bevelled rim top (photo 2) and rounded walls that are 10.3 mm thick. The fabric is clay-rich consisting of evenly-spaced light gray, rounded lithic inclusions that are, on average, 6 mm wide. A very heavy slip covers these and the pot is medium brown in colour. The decoration consists of a row of fingernail impressions on the rim edge (photo 1), followed by horizontal rows of twisted cord (3 mm strand) on the rim (photo 3) and body.



BM 32 is a rim fragment from a vessel with a simple rim with straight walls (photo 2). It is 9.5 mm thick and the fabric is sandy and clay-rich with evenly-spaced rounded black lithic inclusions, 4-6 mm wide. The vessel is slipped and it is blackened on the outside and medium brown inside with a black core. The decoration on the rim top is a row of curved impressions and a horizontal groove on the wall under the rim (photo 1).



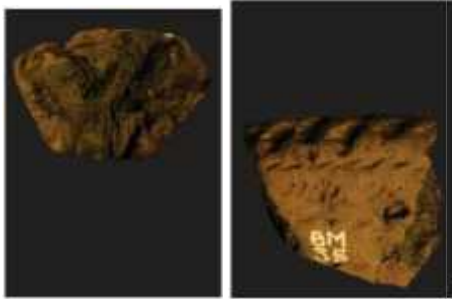
NMS X.BM 33

BM 33 is also a rim fragment from a straight-walled vessel with a slightly insloping flat rim. This sherd also may really belong in the Grooved Ware section since the fabric is also very sandy with rounded, light gray and white lithic inclusions (7 mm wide). The slip on this pot is heavy and it is deep red on the outside, reddish/brown on the inside and gray in the core. A row of bone impressions encircles the rim, like that of BM 32.



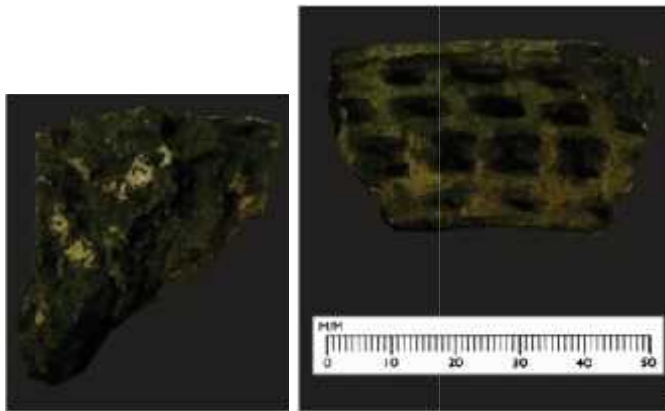
NMS X.BM 34

BM 34 is a rim fragment from a pot with a wide rim that has a flat top that slopes in and hangs over the outer wall. The walls then bend in to form a vase- or bowl-shaped vessel – most likely of the Meldon Bridge substyle. The walls are 10.5 mm thick and the fabric is extremely gritty with very angular, dark gray lithic inclusions that are 2-3 mm wide and 5-6 mm wide. White flecks were also noted. The vessel is slipped and the walls are medium brown with blackening on the rim. Rows of fine twisted cord (2 mm strand) ornament the rim and short, diagonal impressions of cord are on the inner side of the rim. On the wall, there are diagonal rows of arced impressions that resemble abstract ocean waves (photo 2).



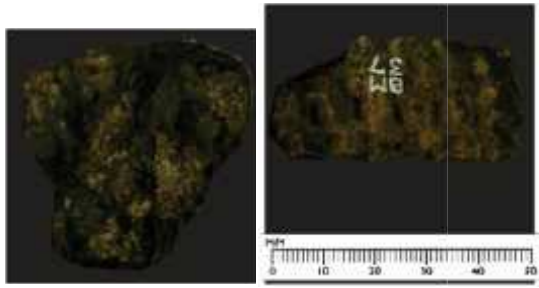
NMS X.BM 35

BM 35 is a rim fragment from a vessel where those form (based on the rim) would comfortably fit into the Mortlake, Ford or Meldon Bridge substyles. It has a flattened top with rounded edges that then bend into the walls, forming a T-shaped profile. The fabric is sandy in texture, but has many large lithic inclusions that include angular, dark gray pieces that are 4-7 mm wide. It is medium brown with black in the core and there are whipped cord maggots on the rim edge (photo 2) and exterior wall, as well a row of twisted cord (2 mm strand) impressions under the rim on the inside (also photo 2).



NMS X.BM 36

BM 36 is a rim sherd from a vessel with a flat top, squared edge and curved wall that may suggest that it was an open bowl, as in the Meldon Bridge substyle. However, the squared edge of the rim may also be indicative of a Fengate affiliation (photo 1). The fabric is gritty with many small very angular, dark gray lithic inclusions, 1-2 mm wide, and fewer rounded white lithics, 2-4 mm wide. The vessel is slipped and it is medium brown on the outside, black on the inside and in the core. The decoration on this pot was done by impressing the rim top with a square, double-ended stick in rows (photo 2).



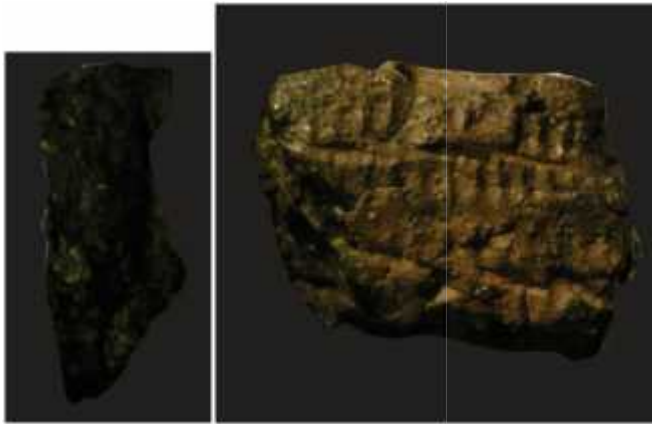
NMS X.BM 37

BM 37 is a rim fragment from a vessel with a flattened top and rounded outer edge and squared inner edge (photo 1). The wall then bends in and the outer rim edge overhangs it, like those of the Meldon Bridge substyle bowls. It has a gritty fabric with very angular, dark gray lithic inclusions that are 1-2 mm wide and rounded, white lithic inclusions that are 3-4 mm wide. BM 37 is slipped and the surfaces are red with blackened areas and black in the core. The decoration consists of deep impressions in rows on the rim top made by a square-ended stick (photo 2).



NMS X.BM 38

BM 38 is also a rim fragment with a flattened top that has rounded edges that form a T-shaped profile. The wall under this thins and curves in, suggesting it was an open bowl like those known from Meldon Bridge (photo 2). The wall is 10.8 mm thick and the fabric is gritty consisting of angular, dark gray lithic pieces that are 7-8 mm wide and rounded white lithics. The vessel has a sandy texture and it appears this was also added to the clay or that the clay came from a sandier source (like many of the pots at Hedderwick). The exterior is medium brown, the interior is red and the core is black. Impressions of square-toothed comb with 1 mm wide teeth are deeply impressed on the rim top (photo 3) and rim edge.



NMS X.BM 39

This rim sherd comes from a vessel with a flattened rim and squared inner edge. There is an external rim bevel just under the rim edge and then a carination at the base of this before the wall of the vessel bends inward, following examples known from the Meldon Bridge substyle. The walls are 10.4 mm thick and the fabric is gritty with evenly-spaced large, rounded white lithics that are 4-5 mm wide. A slip was placed to cover these and the walls of the vessel are red on the outside, black on the inside and in the core. The top of the rim was decorated with lines of whipped cord on the rim top and maggots of this impression just under the rim on the inside. The sherd represents about 1 % of the original pot.



NMS X.BM47

BM 47 is a body sherd from a vessel with walls that are 10.2 mm thick that are made from a clay fabric that is gritty with white, crushed lithic inclusions. These are 2-3 mm for the most part, but some are up to 7 mm and the vessel was slipped. It is medium brown with a gray core. The only visible decoration is a row of pinched fingernail impressions on one side of this sherd.



NMS X.BM 48

BM 48 is a body sherd from a vessel with 10.5 mm wide walls and a gritty fabric consisting of dark gray, angular lithic inclusions that are 2-3 mm wide, and rounded white lithics that are 6-7 mm wide. It is slipped and fired to a medium brown colour on the outside and black on the inside and in the core. Grooved herringbone ornaments the external side of this sherd.



NMS X.BM 49

BM 49 is a body sherd that is 10.5 mm thick and has the same fabric as BM 48: gritty with dark gray, angular lithic inclusions that are 2-3 mm wide and rounded white, lithic inclusions that are 6-7 mm wide. It has reddish/brown surfaces and a brown core and the exterior wall is decorated with parallel, arched grooves.



NMS X.BM 50

BM 50 is a sherd that is 10.4 mm thick and has a gritty fabric with very angular, dark gray lithic inclusions that are 2-3 mm wide. It is slipped and the walls are dark brown on the outside, yellowish/brown on the inside and black in the core. The exterior is decorated with parallel grooves that have flayed ends and fainter grooves, which run perpendicular to these, just above.



NMS X.BM 52

BM 52 is also a body sherd that is 9 mm thick and has a fabric with rounded, white lithic inclusions that are 1-2 mm wide, and angular, gray lithic inclusions that are 3-4 mm. A heavy slip was placed over this and it is reddish/brown with a black core. The decoration consists of lines of stamps from a square-ended tool, possibly a stick or carved bone.



NMS X.BM 53

BM 53 is a small body sherd that is 10.5 mm wide and has a somewhat gritty fabric with sand, and white, rounded lithic inclusions that are 5-6 mm wide. A sparkle to the fabric suggests a mica content in this too. A heavy slip was placed over this fabric and the sherd is reddish/brown with a black core. Horseshoe-shaped impressions ornament the surface, which appear to have been impressed using a birdbone.



NMS X.BM 54

This sherd is 10.3 mm thick and has a fabric that is extremely gritty comprising natural, white lithic inclusions that are 1-5 mm wide and grog. It is slipped and the surfaces are reddish/brown and the core is black. Left-handed fingernail impressions, which slightly overlap one another, form parallel lines across the surface of the vessel.



NMS X.BM 55

This fragment comes from the body of a vessel with 10.3 mm thick walls and a fabric that is extremely gritty with angular, dark gray lithic material that is 3-5 mm wide. It is slipped and the surfaces are reddish/brown with a black core. The decoration on this sherd is unique – it is the impression of a shell, possibly made by pressing a seashell into the clay, or by placing maggot impressions in an arc.



NMS X.BM 56

BM 56 is a wall fragment that is 10.2 mm thick and has a gritty fabric with crushed, gray and red stone – each piece measuring 3-4 mm in width. It is slipped on both sides and the surfaces are red. The decoration consists of rows of deep impressions in an H-shape that appear to be from a birdbone end.



NMS X.BM 57

This fragment comes from the wall of a vessel with 10.4 mm thick walls and a fabric that is very gritty with dark gray lithic material (3-4 mm). It is heavily slipped and the walls are dark red on the outside, black on the inside and in the core. The decoration on this fragment consist of rows of square impressions, possibly made by the end of a stick.



NMS X.BM 60

The sherd from BM 60 is a coarse and gritty piece whose fabric consists of angular, gray lithic inclusions that are 7-8 mm wide. It is slipped and yellow/brown on the outside and red in the core. The decoration on this sherd consists of horizontal lines of loosely-twisted cord (1.5 mm strand) with interspaced horizontal incisions and diagonal incisions.



NMS X.BM 583

The rim sherd, BM 583, has a flat top and a straight inner wall whilst the outer edge appears flat (photo 1, inner wall to the left). The fabric is fairly gritty consisting of angular, light gray lithic inclusions that are 2-3 mm wide. It is slipped and the surface is light brown with a brown core. Horizontal rows of deeply-impressed, twisted cord ornament the rim top (photo 2).



584

BM 584 is a rim with a flattened top and squared inner edge and a moulded outer edge that hangs over the wall of the vessel, following the Meldon Bridge substyle of the tradition. It is composed of a fabric that is gritty with white lithic material that is less than 0.5 mm wide and black lithic inclusions that are 1-2 mm. A heavy slip was placed over this and it is reddish/brown on the outside, black on the inside and dark brown in the core. Deeply grooved lines, forming a herringbone pattern, is visible on the rim top.



BM 585 is also a rim sherd with a flattened rim top and a straight inner wall. It is very gritty with angular, black lithic inclusions that are 7-8 mm wide and is slipped. The walls are brown on the inside and brown in the core. The decoration on this vessel only remains on the rim top, where rows of birdbone impressions were placed.



NMS X.BM 586

This fragment comes from a vessel that has a sandy fabric with many lithic inclusions. This includes gravel, sand and rounded, white lithic pieces that are 5-6 mm wide. A heavy slip was placed over top and it is dark brown on the outside and brown in the core. The decoration comprises rows of deep birdbone impressions.



NMS X.BM 590

BM 590 is a rim fragment from a vessel with a flat-topped rim and moulded outer rim edge that overhangs the walls as in the Ebbsfleet and Meldon bridge substyles. It has a gritty fabric with white, rounded lithic inclusions that are 4-5 mm wide, and angular, gray lithics that are 1-2 mm. A slip covers this and the walls are medium brown. Rows of finely-twisted cord ornament the rim top.

BM 595 is not pictured here, and it is listed in the catalogue as the only example of Grooved Ware in the BM 500s series; however, it was found with the rest of the Impressed Ware in the Western Pit and it does not have the characteristic Grooved Ware fabric seen in the other sherds from the site. Its fabric and form is much more akin to the other Impressed Ware

sherds. This sherd is 10.5 mm thick and the fabric is extremely gritty comprising angular, gray lithics that are 7-8 mm. It has a heavy slip and was buffed and is brown on the exterior, gray on the interior and brown in the core. The only decoration is some grooving on the external surface of the vessel wall.

7. Crookhaven, Northumberland

All of the sherds from Crookhaven that were not found in a barrow are part of the collection of finds that was given to Canon Greenwell by Captain Carpenter (Longworth 1969). Longworth's (1969) re-evaluation of these later identified Greenwell's mistake in cataloguing them as Bronze Age vessels and it is now commonly accepted that these are Impressed Ware and fall into their own local style, called the Ford style. The characteristics, such as an externally bevelled rim, high shoulder, rounded rim top and ornate decoration focused on the rim, demonstrates links to Meldon Bridge, Peeblesshire and North Yorkshire. Similarities could also be pointed out between the Ford style and Mortlake ware, although it is not certain if these vessels were round-bottomed.



1879, 1209.1743

The heavy rim sherd listed as 1743 shows a rounded rim top and flattened rim edge on the outside. An external neck bevel is below this, which forms a shoulder carination at its base and the wall then gently slopes inward. The walls of this vessel are thick at 18.5 mm and the fabric is clay-rich. These include: dark gray and white, very angular lithics that are mostly 6-7 mm, but range up to 9-13 mm, areas where organic inclusions were burnt out, natural gravel and grog. A heavy slip was put over these and the sherd is brown on the outside, reddish/brown on the inside and brick red in the core. The rim diameter was measured to be

160 mm. Diagonal rows of twisted cord (2.5 mm strand) ornament the rim and on the body there are diagonal slashes in the opposite direction. These two rim sherds represent about 10-15 % of the original pot.



1879, 1209.1743a

This body sherd has a similar decoration to 1743, but it is treated as a separate vessel here because it has a different fabric and wall thickness. It comes from a thick, heavy vessel and is 25.5 mm thick. The fabric is extremely gritty with very angular/angular black and brown lithic inclusions that are 8-10 mm wide and up to 12 mm wide. A few smaller lithic inclusions were noted in dark gray and grog was also identified. A heavy slip covers these and the sherd is dark brown on the outside, black inside and brown in the core. Parallel slashes ornament the external surface and striations from wiping are very visible on the inner surface. This sherd represents about 5 % of the original vessel.



1879, 1209.1743b

This sherd comes from a relatively thin-walled vessel (14 mm), possibly from near the rim. It has a clay-rich fabric with very few inclusions – angular, dark gray lithics that are 2-3 mm and 5-6 mm and grog. An interesting impression was also seen in the fabric of this sherd (photo 2), which looks like the imprint of a fossil or a macrofossil of some sort that was included in the clay and subsequently was burnt or fell out. A very heavy slip covers the surfaces and it is dark brown on the inside, outside and in the core. The only decoration

observed were parallel, short twisted cord impressions placed lightly in the slip. What remains here is likely less than 5 % of the original vessel.



Sherd 1744 comes from a heavy, but well-formed, vessel with a flattened insloping rim top that is flat and then rounded on the outer edge. The neck is then bevelled both inside and out (photo 2), creating a high shoulder carination on the outside of the vessel and then the wall bends so slightly in as it descends. In the core, a join is visible, which demonstrates a slab construction technique (photo 2). The walls are 17.5 mm thick and the fabric is clay-rich, consisting of angular/subangular lithic inclusions that are 5-7 mm wide (a few are as large as 10 mm) and grog. The sherd is well-slipped and it is dark brown on the outside, reddish/brown on the inside and in the core. The rim diameter was determined to be 180 mm. This vessel was decorated with concentric semi-circles on the rim top with an upper border of horizontal lines, all in finely twisted cord (2 mm strand) (photo 3). On the outside rim edge, there is herringbone of this twisted cord and then the neck bevel is plain. The shoulder carination has a horizontal line of cord that accentuates it and then the body is covered with diagonal rows of twisted cord. This sherd represents about 20 % of the original vessel.



This small rim sherd has a flattened insloping rim with a rounded rim edge on the outside and a slight neck bevel (photo 2). The shoulder carination is only slight and then the wall bends in and is rounded, possibly signifying that this vessel had more of a bowl shape than a vase shape. The walls are 14 mm thick and the fabric is gritty with angular, black lithic inclusions that are 3-5 mm (some up to 10 mm), natural gravel and red lithic flecks. A heavy slip was placed over this and the vessel is dark brown on the surfaces and black in the core. The rim was measured to be 190 mm in diameter. Like 1744, this sherd is decorated on the rim top with concentric semi-circles of twisted cord (1 mm strand) with horizontal rows as a top border (photo 3). Grooved herringbone is on the rim edge on the outside and under the rim bevel are diagonal lines of twisted cord. The similarity in decoration of this vessel to 1744 is startling and it is essentially a smaller copy of the former pot, which may suggest it was made by the same person. This sherd represents less than 5 % of the original vessel and it has been treated for conservation, causing the colour to be obscured and the surfaces to appear shiny.



1879, 1209.1746

This fragment represents less than 1 % of a vessel. It is a rim only that has a flattened top and rounded edges and an internal bevel under the rim so that it overhangs the walls of the pot. The fabric is very gritty comprising rounded, natural lithic inclusions, 5-6 mm and smaller, and a lot of grog. The vessel was then slipped and wiped and fired to a dark brown colour on the surfaces and reddish in the core. The rim diameter is 150 mm. This vessel was then decorated (at least on the rim) with incised herringbone; it is smudged in several places, possibly due to moving the vessel before it was completely dry. Slight wear was noted on the rim top.

8. Red Scar Bridge, Ford, Northumberland



1879, 1209.1747

This wall sherd is from a relatively thin-walled vessel (14 mm) with a very gritty fabric. There are angular, dark gray lithic inclusions (3-4 mm and 5-7 mm wide) and a few white lithic flecks. A light slip is on the surface of the sherd and it was wiped smooth, as seen by striations. The exterior is light brown, the inside is blackened and the core is dark brown. The decoration on this vessel is particularly intriguing. Parallel, diagonal grooves converge to form triangles and those that point to the right are infilled with vertical maggot impressions and a central row of deep stabmarks. A light deposit of manganate was identified on the surface of this sherd; it represents about 10-15 % of the original pot. Although this vessel has grooved decoration and a style similar to Grooved Ware known in the Milfield Basin and in Yorkshire (Manby 1974), it is argued that it is Impressed Ware here because of the fabric type and the size of the inclusions. Since the two traditions overlapped, temporally, it is possible that this represents a hybrid.

11. Cheviot Quarry, Milfield, Northumberland



F126, P3

This fragment from the Cheviot Quarry is a rim that has a flattened top that is rounded on the inner edge and moulded to overhang the vessel on the outer edge (photo 2). A deep neck bevel ends with a high, carinated shoulder and then the wall bends in, following the Ford substyle seen in the Greenwell Collection sherds. It is only 9 mm thick, but the fabric is similar to the Ford finds as it is clay-rich with angular, gray lithic inclusions that are 5-6 mm wide and a few pieces of calcite that are 1 mm. A slip was placed over the surface, although it is mostly worn away now, but the inclusions still protrude. The exterior is brownish/red, the interior is light brown and the core is dark gray. A rim diameter of 230 mm was determined. No decoration was visible on this sherd, although it only represents about 1 % of the vessel.



F279, P2

This flat-topped rim has a more squared edge internally and a moulded rim edge externally, which overhangs a neck bevel. The shoulder is sharply carinated and then the walls bend in dramatically (photo 2). The walls are 13 mm thick and the fabric is very coarse and extremely gritty with very angular, black lithic inclusions that are 7-9 mm wide. The vessel is heavily slipped and there appears to be mica in the slip material as the surfaces sparkle. The external surface and core are black with a red under tone. The rim diameter is 220 mm. This sherd was decorated with two rows of impressions on the rim top that may be a tightly whipped cord (photo 3). On the exterior rim edge, there are two rows of comb (square-toothed) and opposing fingernails, creating V-shapes encircle the neck just above the shoulder carination (photo 1). This sherd represents only about 5 % of the original vessel.

12. Lanton Quarry, Milfield, Northumberland



F355, P463-466

This series of fragments come from a vessel with a flattened rim top (photo 1, exterior of rim; photo 3, rim top) and walls that bend in from the rim edge to form a splayed profile (photo 2). The base is flat (photo 4). The walls of this vessel are 15 mm thick and the fabric is somewhat gritty with very angular, gray lithic inclusions that are 3-6 mm. The clay has a sandy feel to it, as does the fabric from the other examples from this site, so it is suggested that the clay source the inhabitants of Lanton Quarry were using must have been especially sandy. The surfaces of this pot were dark brown and the core was black. Decoration consists of whipped cord on the rim in two rows (photo 3) and parallel, diagonal whipped cord under the rim outside in opposing directions, which create a herringbone pattern (photo 1). The fragments represent less than 1 % of the original vessel.



F783, P768, P832-834, P763-766

The sherd and fragments that remain of this vessel make up about 5-10 % of the original pot. The largest is the rim, which is flattened on the top, with a squared edge internally and a moulded edge externally (photo 2). The shoulder is accentuated with a cordon and then the walls bend in a vase-shaped profile. The walls of this vessel are thick and heavy – they measure 17.5 mm thick. The fabric is extremely gritty with extremely angular gray and white lithic inclusions that are 5-6 mm wide and 7-8 mm wide, respectively. Sand was also included, although the clay at this site does seem to be particularly sandy. The exterior of this vessel is brown with orange patches and the interior is brick red with brown places. The core is dark gray. This was a large pot as the rim diameter was 280 mm. The decoration on this vessel consists of three rows of twisted cord on the rim top (photo 3), and rustication made by finger-pinching in the neck bevel and over the shoulder (photo 1). Under this, on the body, are horizontal rows of twisted cord.



F799, P 771/772

This body sherd from a thick, gritty vessel is 14 mm thick and has a fabric of sand, clay and very angular, dark gray added lithic inclusions that are 5-8 mm. Rows of birdbone impressions ornament the exterior of this vessel and it is orange/brown on the outside and black and sooty inside and in the core. A deposit of calcium was noted on the external surface and it represents less than 1 % of the original vessel.



F973, P741-745/47

These small, eroded fragments are body sherds from a vessel with very sandy fabric and about 60 % very angular, dark gray lithic inclusions that are 5-6 mm and 9-10 mm wide. The external surface is eroded so no decoration could be seen, but the internal colour is black and the core is light brown. These fragments represent less than 1 % of the vessel.



F973, P565, 567

These two fragments are from a thinner-walled vessel (9.5 mm) with a very sandy fabric with large lithic inclusions. These are subangular, dark gray lithics that are 6-7 mm wide. The fabric of these fragments are the only ones that stand out in F973: they are harder and sandier. The rest have very similar fabric and may be from the same pot, whilst these differ. The surfaces and core are brown and there is no visible decoration. They represent less than 1 % of the vessel and are highly eroded.



F973, 566/746

Two small sherds from a vessel with 13.5 mm thick walls are pictured above. Their fabric is sandy with very angular, dark gray inclusions that are 6-7 mm and up to 10 mm wide. The

exterior surface is dark brown and the inside is brownish/gray with a black core. No decoration is visible. These fragments represent less than 1 % of the original vessel.



F 973, 748

A few fragments, much like 741-45/47 and 566/746 in the same context, were also found. They have a sandy fabric with large, very angular lithic inclusions that are 7 mm wide, on average. No decoration is visible. They are orange brown on the outside and have a brownish core. Less than 0.5 % of the original vessel is represented.



F973, 568

One highly eroded fragment was also found that is most similar to 565/567 from the same context. It has a very sandy fabric with dark gray lithic inclusions that are 4-5 mm wide. No decoration is visible and the surfaces and core is gray. Less than 0.5 % of the vessel is represented here.



F973, P29

Four sherds (two pictured above) from a sandy vessel have a 12 mm wall thickness and a very gritty fabric with very angular, dark gray and black lithics that are 6-7 mm and up to 10 mm, and sand. It is dark brown with blackening on the surfaces and the core is black. A zigzag of light grooves adorn the surface of the sherds. These sherds represent about 1 % of the original vessel and it is questioned if these are actually Impressed Ware. The fabric is typical of Grooved Ware in the region, as is the decoration, and a thicker wall may simply be an indication of a heavy Grooved Ware pot or Tyne-Forth Regional Ware.

15. Bewick Moor, Northumberland



1879, 1209.1751

The rim sherd, 1879, 1209.1751 was found in the topsoil. It has a flattened, insloping rim with everted walls. The fabric is gritty with very angular, dark gray lithics (5-7 mm and

18.5 mm. The rim top is decorated with grooved zigzag lines and slashes in a zigzag pattern are on the external surface under the rim. Only 1 % of this vessel is represented here.

APPENDIX 3: GROOVED WARE*

1. Hedderwick, Dunbar, East Lothian



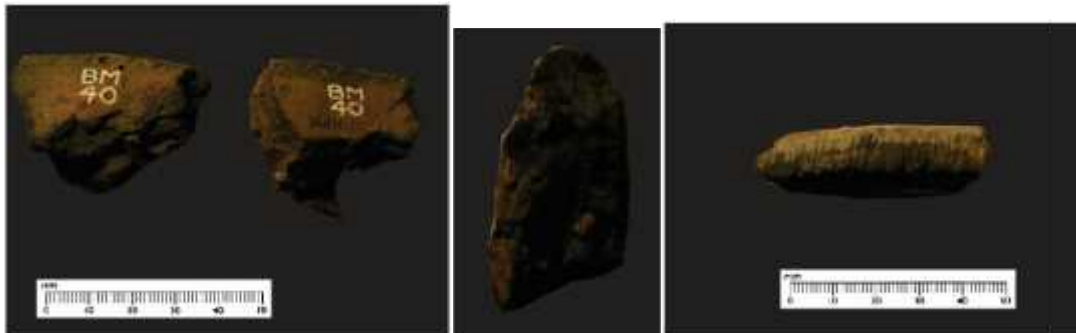
NMS X.HR 563, Sherds 1, 4

These two sherds come from a cylindrical vessel with straight walls and a simple rim that is squared at the top and bends slightly inward. The walls are 8 mm thick and the fabric is very gritty with dark gray lithic inclusions that are 2-3 mm wide or smaller. The fabric is smooth and there is a light slip on the pot surfaces. The colour of the walls are reddish/brown on the outside with blackening towards the rim, black inside and in the core. A rim diameter was determined to be approximately 230 mm. The decoration on this vessel comprises three deep grooves under the rim on the outside and then groups of three parallel grooves that are vertically-set with herringbone inside. The herringbone was incised after the vertical grooves as it cuts them in several places. A light deposit of manganate was noted on the surfaces of this vessel and the sherds are estimated to make up about 20 % of the original pot.



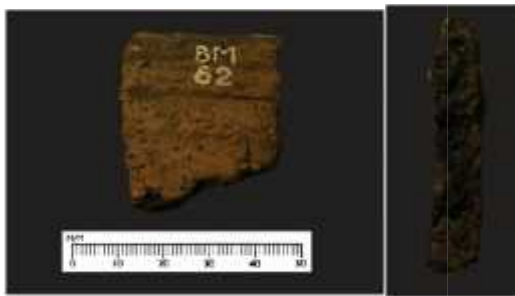
X.BM 592

This sherd, which is from the western pit in Richardson et al.'s original excavation, was found amongst other sherds of Neolithic type. In the catalogue it mentions that the decorated sherds seem to all have come from this pit, whilst the undecorated ones were from the eastern pit (although these are very few anyway). It is listed under the heading of 'Peterborough Ware'; however, the form of this rim and its fabric resemble more the Grooved Ware tradition. The decoration is in keeping with Impressed Ware or the early Bronze Age wares since it uses twisted cord, which was less common in Grooved Ware (except in Durrington Walls style), but the motifs and way it was used is much less profuse. Consequently, it might be from a vessel of mixed tradition or mixed substyle (Clacton/Durrington Walls). NMS X.BM 592 is a simple rim sherd with a flattened rim top from a straight-sided vessel. The fabric is clay-rich with a few rounded pebbles (5-6 mm wide), some lithic inclusions, 1-2 mm wide and sand. The fabric has a sandy texture and there is a slip over the surface that is reddish/brown. The decoration consists of vertical rows of twisted cord on the rim (3 mm wide strand) and horizontal rows of a finer twisted cord (2 mm wide strand) under the rim on the outside. This sherd represents only about 1 % of the original pot.



NMS X.BM40

NMS X.BM 40 is listed as 'Neolithic B' or, as it is now known, Late Neolithic. It has been placed in the Grooved Ware category here because of the rim and vessel shape, the decoration and fabric characteristics. It is a fragment from a simple rim that is pointed and then thickens as it becomes the wall. The vessel is straight-sided and the walls are up to 10.1 mm thick. The fabric is sandy and clay-rich with some white, rounded lithic inclusions that are 5-6 mm wide and appear to be natural. The vessel is slipped and the walls are red on the outside, black inside and in the core. NMS X.BM 40 was decorated with vertical grooves on the rim top and diagonal rows of twisted cord inside the vessel under the rim – this is very faint and the cord diameter seems to have been about 1 mm. No dimensions of the original vessel could be obtained as this single fragment represents only about 1 % of it.



NMS X.BM 62

NMS X.BM 62 and NMS X.BM 63 are the only sherds that are listed in the catalogue as Grooved Ware. NMS X.BM 62 is an internally-bevelled, straight rim that follows the Durrington Walls or Rinyo substyle rim types. It is 7.5 mm thick and is made of clay with a sandy texture with gravel, sand and black lithic inclusions that are 0.5 -1 mm wide. It is important to note that it is this fabric that sets the Grooved Ware apart at Hedderwick – its sandy texture and use of natural and small inclusions differs from the other traditions. NMS X.BM 62 is smoothed on the surfaces and they have fired to a medium brown on the outside, brown with black areas on the inside and black in the core. The decoration consists of three slight grooves that create three ridges under the rim on the outside. The rim bevel was also carved by grooving. The sherd represents less than 1 % of the original vessel.



NMS X.BM 63

NMS X.BM 63 is also a rim fragment that has a flattened rim top and extends into a straight wall. It is 8.5 mm thick and has the typical sandy fabric with sand and gravel inclusions that are up to 1-2 mm wide. The lithic material appears to be crushed. The vessel was then wiped and if there is a slip, it is very thin. NMS X.BM 63 is dark brown on all sides and it has been decorated with rows of twisted cord inside the rim and two grooves under the rim on the outside with diagonal grooves below. It also is less than 1 % of the original pot.

6. Ewart I, Milfield, Northumberland



P6

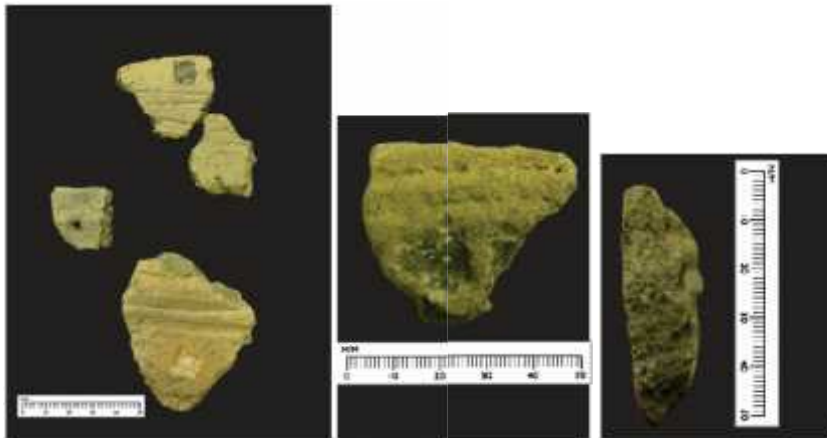
This vessel, P6, remains as three rim sherds, one base (photo 3) and several body sherds from a thin-walled, straight-sided vessel. The walls are 7.5 mm thick and the fabric is smooth and clay-rich with evenly-spaced, subangular lithic inclusions that are 1-2 mm and up to 3 mm, and grog. A possible slip is visible on the outside of the vessel and it is heavily wiped with cloth or leather. The vessel is brown on the outside and inside and there is a black sootiness towards the base. The core is also brown. The decoration on this vessel consists of horizontal grooves under the rim on the outside, with a row of stabmarks between the second and third line. This is repeated inside under the rim. The sherds and fragments represent about 1-5 % of the original vessel.

7. Cheviot Quarry, Milfield, Northumberland



F61, P5

The rim and body sherds from P5 demonstrate a pot with a simple, inturned rim and straight walls from a bucket-shaped vessel. The walls are very smooth and 6 mm thick and the fabric is very sandy with few inclusions. These include sparsely-distributed tiny gray lithics, 0.5 mm or less, quartz pieces that are 1 mm and calcite that is 2-3 mm. The fabric is hard and very well-made. The surfaces of this pot are brown and there is no visible decoration, except for a small groove under the rim (which may be accidental); however, they represent less than 1 % of the original vessel so this does not mean there was not decoration.



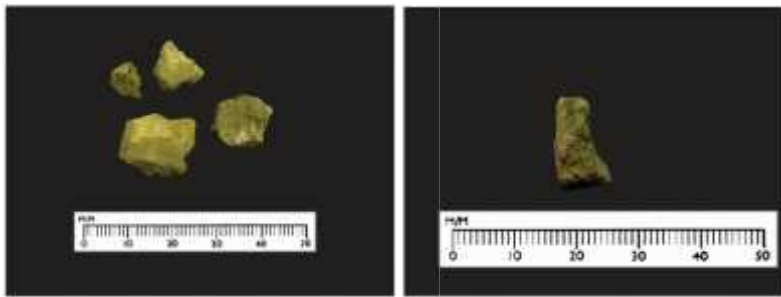
F133, P2

These sherds are from a pot with a simple, vertical rim and a bucket-shaped profile (photo 3). The rim inside has 'ribbing' that suggests a coil-method of building (photo 2), which is also seen on sherds at Thirlings. The walls of this vessel are 9.5 mm thick and the fabric is sandy with a lot of gravel and some angular, light gray and white lithic inclusions. There are sand and gravel inclusions and the walls are yellowish/brown on the outside, brown on the inside and in the core. horizontal, parallel rows of grooves ornament the outside and three horizontal rows of cord are inside the rim (photo 2). Stabmarks were also noted under one groove on the outside on one sherd. Collectively, these sherds represent about 10 % of the original vessel.



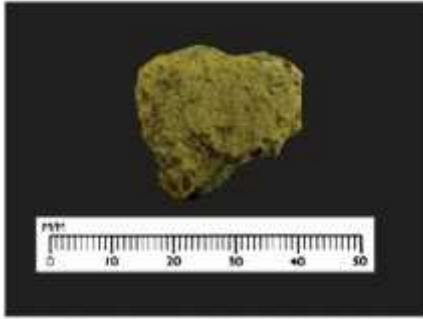
F133, P6

This fairly vertical wall sherd is from a pot with 8 mm thick walls. It has a very sandy fabric with subangular, dark gray lithic inclusions that are 2-3 mm and white, calcite flecks that are less than 0.5 mm. The walls are dark brown on the outside, yellow/dark brown on the inside and brown in the core and the decoration consists of rows of fingernail or stick impressions. Striations are visible inside where the wall was wiped smooth.



F133, P7

Fragments from a base and a very small base sherd are the meagre remains of P7, a flat-based vessel with very thin walls (5 mm). Their fabric is gritty consisting of angular pieces of calcite, quartzite and gray lithic material, all about 1-3 mm wide. They are too fragmentary to make out any decoration, but the surfaces are dark brown and the core is also brown. They represent less than 0.5 % of the vessel.



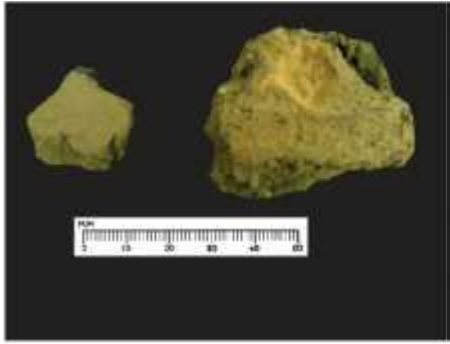
F133, P8

This is a crumbly fragment from a vessel with 9.5 mm thick walls. The fabric is very gritty with gravel and angular, dark gray lithic inclusions that are 1-2 mm wide, and sand. No decoration is visible, but the walls are reddish brown on the outside, dark brown on the inside and in the core.



F 163, P1

These two body sherds are from a well-made vessel with 10 mm thick walls. They have a fabric that is sandy to the touch and have light gray, angular lithic inclusions that are 1-2 mm wide and quartz (possibly natural). The walls are brick red on the exterior, brown on the inside and in the core. Parallel rows of grooved slashes ornament the surface. These represent about 1 % of the original vessel.



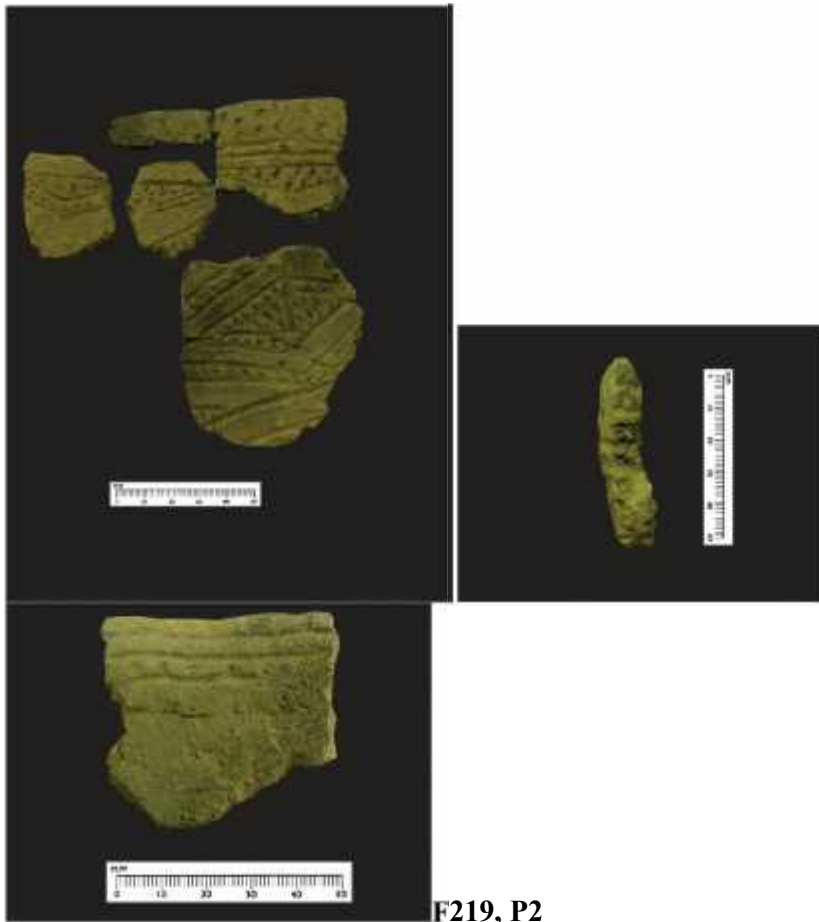
F168, P3

These two sherds were catalogued as the same pot, but they are different from one another and it is suggested here that they should be separate. The left sherd in the photo is 9 mm thick and has a sandy fabric with many small and fine angular lithic inclusions that are 1-2 mm. It is brown on the outside and black on the inside. The right sherd is 13 mm thick and has a gritty fabric consisting of angular gray lithics that are 3-4 mm and larger. It is red on the outside and black inside. The only similarity is that both have light grooves on the surface; however, this is the case for all of the Grooved Ware at the site.



F168, P4

This body sherd is from a pot with 7 mm thick walls and a smooth fabric that has angular gray lithic inclusions, 2-3 mm wide, rounded, white lithics, 1 mm or less, and larger white lithic inclusions that are 3-4 mm wide. Sand is also a large component and the fabric has a sandy feel. This sherd is yellow on the surfaces and the core is gray and it is decorated with opposing, diagonal grooves that form the edge of a triangle. It makes up less than 1 % of the original vessel, but is almost identical to a sherd found at Thirlings, which is less than 1 km away.



F219, P2

This vessel is listed simply as Late Neolithic, but it has many characteristics that are typically Grooved Ware, including form, decoration and fabric. For this reason it is placed in this category. P2 has a simple, straight rim and straight walls that are 7.5 mm thick. The fabric is clay-rich and hard with rounded white, lithic inclusions that are 4-6 mm and widely dispersed, and sand. The exterior is yellow/brown on the outside, dark gray inside and the core is black. The decoration includes three horizontal grooved lines inside the rim with a row of stabmarks between the third and fourth line (photo 3), a pattern already seen at this site. There is then a panel of small cord impressions just under the rim outside, followed by horizontal lines and then inverted triangles, infilled with cord motifs. The body also has converging, diagonal lines that created diamond patterns that are filled the cord motif (photo 1). The rim diameter of this vessel is 125 mm and these sherds represent about 25 % of the original vessel.

APPENDIX 4: OTHER CONTEMPORARY POTTERY*

1. Archerfield, Gullane, East Lothian



X.HR 562

The remains of a coarse vessel was amongst the Beaker sherds in the collection from Archerfield. This site had been a mixed deposit and so it would not be surprising to find a diverse set of pots in the assemblage and this certainly is not a Beaker. It bears many characteristics that are typically found in the Bronze Age – for example, in the fabric and wall thickness, but the form is reminiscent of Grooved Ware. For this reason, it is placed in this section of the document. NMS X.HR 562 remains as a rim and several sherds and fragments from a heavy vessel that had internal cordons inside the rim. It is bucket-shaped in profile and the walls are thicker at 11 mm and the fabric is very gritty comprising angular, dark gray and brown lithic inclusions that are 5-6 mm wide. It is heavily slipped and the walls are dark brown. There is no decoration on this pot, except for the cordons inside the rim. The remains represent less than 5 % of the original vessel.



NMS X.HR 564, 19.1-19.27

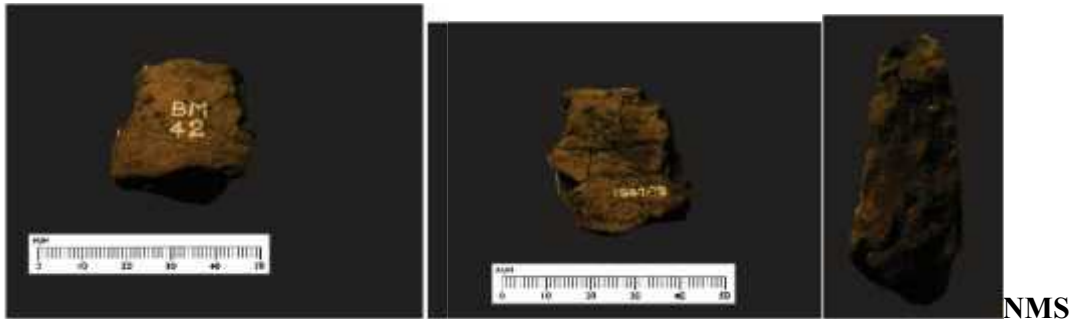
The sherds from NMS X.HR 564 are from a vessel with a simple, straight rim with straight walls (photo 3) and a bucket-shaped profile. The walls are very thin at 6.5 mm, but the fabric is very gritty with about half of its composition comprising angular gray lithic inclusions that are 1-3 mm wide. The pot is slipped on the outside and it is yellowish/brown on the outside with blackening towards the rim (photo 1). Inside, the walls are dark gray and the core is also gray. A rim diameter was determined at 240 mm. The only decoration on this pot is two horizontal rows of twisted cord that are impressed under the rim on the inside of the vessel (photo 2) and there is a seed impression on the inner wall. The most typical characteristics of this vessel are the form and rim, which suggest Grooved Ware affiliations; however, the walls are very thin like Beaker. The fabric is coarse and typical of Impressed Ware or the Early Bronze Age wares and the decoration, using cord, follows this as well. This pot has been put into the Neolithic-derived category because of this mixing of traditions and the fact that it was found in association with Beakers, suggesting their contemporaneity.

2. Hedderwick, Dunbar, East Lothian

The sherds from vessels: NMS X.BM41-46 are listed in the catalogue with the rest of the 'Neolithic B' remains and are what Callander (1928-9) referred to as either Neolithic or 'Overlap' pottery. NMS X.BM41-43 have fabrics and forms that are most like Grooved Ware, but the decoration on them is not typical at all. And NMS X.BM44-46 have a fabric like Impressed Ware (or indeed, the Bronze Age wares since they are more similar to one another than they are to Grooved Ware) and their decoration is typical of those traditions, but they are too fragmentary to be certain of this – each only represents about 1 % of the original vessel, if that. Since NMS X.BM41-46 were all found together and it is known that Impressed Ware and Grooved Ware overlapped slightly in time, it may simply be that this is a case of a site being re-used frequently; however, it is also possible that these sherds demonstrate the mixing of ideas that is put forth in the description of Tyne-Forth Regional Ware. As a consequence, they are described in the Neolithic-derived section, but under the assertion that they may actually belong in the Grooved Ware and Impressed Ware sections.

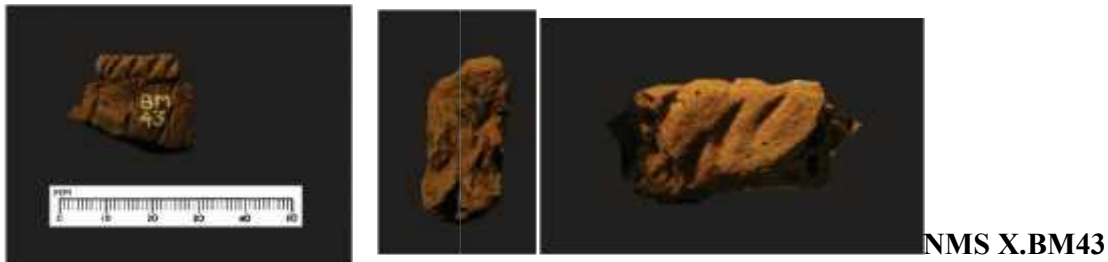


NMS X.BM41 is a rim sherd from a vessel with a simple, insloping rim and straight walls. It is 10.2 mm thick and has a sandy fabric with a larger proportion of clay and some white, rounded lithic inclusions that are 5-6 mm wide. The surfaces are black on the outside, red on the inside and the core is black. The decoration on NMS X.BM41 was done using a very finely twisted cord (0.5 mm strand) in two superimposed rows on and inside the rim. On the wall outside, rows diagonal maggots create S-shaped impressions under the rim.



X.BM42

NMS X.BM42 is also a rim sherd from a vessel with a flattened rim top and straight walls that thicken as they descend to 10.2 mm. The fabric is sandy with several large, angular, gray lithic inclusions that are 4-6 mm wide, grog and black, rounded lithics, 2-3 mm wide having been added. The vessel was slipped and it has medium brown surfaces and a gray core. Rows of fine twisted cord (0.5 mm strand) are impressed inside the rim on the wall of the pot.



NMS X.BM43 is a rim fragment from a pot with a flattened rim top that slopes inwards just slightly and faintly overhangs the inner portion of the vessel. There is a very small bevel under the rim on the outside and the walls under this are straight. The fabric is clay-rich with just under half of its make-up comprising light gray, angular lithic inclusions that are 7-10 mm wide. It is wiped and there may be a very slight slip over the surface. NMS X.BM43 is reddish/brown on all surfaces. Left-handed fingernail impressions ornament the rim and body of this vessel.



NMS X.BM44

NMS X.BM44 is a much heavier rim fragment that has a bevelled rim top that slopes inward and has a flat rim edge. Below this is only a slight inward bend to a straight wall. The fabric is clay-rich as well with rounded, black lithics that are 4-6 mm wide. The sherd itself is 10.4 mm thick. There is no decoration on this rim and it is reddish/brown on its surfaces and gray in the core.



NMS X.BM45

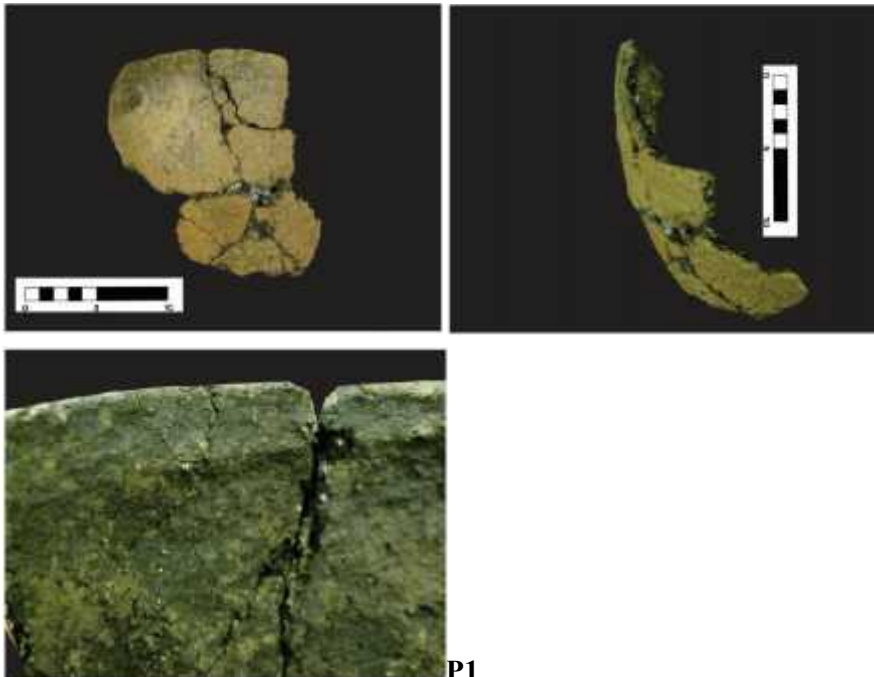
NMS X.BM45 is a body sherd from a vessel with walls that were 10.3 mm thick and made of a clay with a gritty fabric with a sandy texture. About half of the clay matrix consists of black, angular lithic inclusions that are 1-2 mm wide, white lithics that are 0.5 mm wide and sand. The vessel was slipped and it is dark brown on all surfaces. Whipped cord maggots are randomly spaced across the surface of this pot as decoration.



NMS X.BM46

NMS X.BM46 is also a body sherd that is 10.1 mm thick and that is made from a clay fabric that is extremely gritty. The fabric contains very angular, dark gray lithic inclusions that are 5-6 mm wide. A heavy slip covers this and it is orange on the outside, dark brown inside and gray in the core. The decoration is the same as NMS X.BM45, although the fabric and colour would suggest that it comes from a separate pot.

5. Whitton Hill, Milfield, Northumberland



P1

This vessel was found in association with cremated remains in the ditch of the Whitton Hill hengiform enclosure and is associated with Beaker dates, yet is obviously not a Beaker. It has

been identified as a 'Beaker-like' vessel, possibly a 'Beaker-like' vessel, possibly a 'Beaker-like' vessel.

U-shaped profile (photo 2). The walls are 9 mm thick and the fabric is very heavily gritted with black lithic inclusions that are angular and 1-2 mm wide and angular calcite that is up to 3 mm wide. Quartz was also observed. The surfaces are rough and if there ever was a slip, it is now gone; they are reddish yellow on the outside, black inside and in the core. There is no decoration on this vessel, except for horizontally placed false lugs at about the shoulder. The scars of two of these are visible and it is inferred that the pot probably had about 3-4 evenly spaced lugs encircling the pot. The rim diameter is 135 mm and the vessel is approximately 150 mm tall. About 35 % of this vessel remains.

9. Cheviot Quarry, Milfield, Northumberland



F102, Beaker 1

The vessel from F102 at Cheviot Quarry was determined to be a Beaker; however, the fabric, surface treatment and much of the form is more similar to Food Vessel or Neolithic pottery and so it is suggested here that this may be another example of a ‘hybrid’ pot. This pot remains as many sherds that make up about 60 % of the original vessel – it has not been reconstructed. The rim is flattened on the top and slopes in. On the outside, the neck is

straight with a multiple set of ridges that extend to the shoulder, which is carinated. The walls, which are 10 mm thick, then bend in and down to a pedestalled, flat base. Ridges from the coil construction were also noticed on this vessel. The fabric of this vessel is also typical of the Neolithic and Bronze Age ‘local’ traditions in that it is extremely gritty with many very angular, black and dark gray lithic inclusions that are 4-5 mm wide having been added to the clay. Natural, rounded white and pink lithic inclusions, 7-9 mm wide, seem to have already made this clay gritty. A possible slip on the outside of the vessel shows striations from where it was wiped smooth, but the inclusions still protrude from the walls. The surfaces are yellowish brown with pink patches and the core is black. The vessel was originally 230 mm tall and 160 mm wide at the rim, whilst the base was too fragmentary to determine its size. There is no decoration on this pot. Although undecorated Beakers are not unheard of, they are rare, and this trait is more commonly seen on pots, particularly from domestic contexts, in both the Neolithic and Bronze Age in the region. Several accidental impressions are clear, however, and these give a unique insight into the provenance of this pot’s inception. On the base, a clear impression of a piece of straw (photo 3) and a seed (photo 4) were immediately obvious, as was the partial impression of a leaf (photo 4). The presence of this leaf in particular may indicate the time of year the pot was left to dry – perhaps in summer or autumn, when the leaves were falling and might have gotten into the house.



F219, P4

Two rim sherds and a body fragment from P4 are the remains of a vessel with a straight, squared rim that has a thickened area just below the rim and then a thin, straight wall. The fabric is very gritty with very angular, gray lithic inclusions that are 5-7 mm wide, and quartzite pieces that are 4 mm wide. Wiping striations are visible on the surfaces and the pot is dark brown on the outside, gray on the inside and dark brown in the core. A row of birdbone impressions are visible on the raised portion under the rim on the outside. These

is that they are coarse and very un-Grooved Ware-like, yet were found with another pot that has many Grooved Ware characteristics. This calls into question the place these two pots should be put into since both have mixed qualities.

12. Chatton Sandyford, Northumberland

Several body sherds from a thin-walled (10 mm) vessel from Chatton Sandyford were examined. They are from the vessel B3 in Jobey's (1968) report of the site. These have rounded white and gray lithic inclusions that measure 1-2 mm, and some up to 4-5 mm, but they do not appear to be natural, but deliberately added. The fabric is abnormally clay-rich for Bronze Age pottery. The sherds are red on the exterior and brown inside and the core is dark gray. A zigzag of fingernail impressions are just under the rim on the outside with two horizontal grooves underneath in the neck. Converging parallel, grooved lines on the outside then form patterns of triangle ends randomly across shoulder, and a grooved zigzag encircles the lower part of the body. The sherds only account for about 5 % or less of the pot and no form could be determined from them. A light deposit of manganate was noted on the external surface. Unfortunately, these were the only remains from Chatton Sandyford available at the GNM for study.

14. Hirst, Ashington, Northumberland



1894.6

This heavy, crudely-made Beaker is slightly asymmetrical and has a flaring rim, straight neck and angular belly, which is 13.5 cm wide. The walls, which are 10.2 mm thick, then bend quickly in a vase shape to a pedestalled, flat base. Inside, the transition is abrupt to a flat base. The fabric of this pot is very gritty with dark gray angular lithic inclusions that are 5-6 mm and up to 10 mm wide and the pot is slipped lightly to cover them. It is brown on the surfaces with pinkish patches. The only decoration on this pot is a row of circular-shaped impressions made with a blunt tool that are in a horizontal line under the rim and a double line just about the belly carination. This pot is not included in Clarke's (1970) corpus and it really does not fit into any of his or Lanting & Van der Waals' categories. Its coarseness may suggest that this is another of Simpson's (1965) Beaker/Food Vessel hybrids, especially considering the clay fabric, vessel colour, and motif and placement of decoration. It would seem this represents a local response to Beaker influence. It is most unfortunate that all that is known of this pot is the nearest town to where it was found and the year it was donated to the museum (indicated by the catalogue number). The pot entirely survives, but it has a heavy deposit of manganate one side and in the base inside. It is 16 cm tall, 151 mm in diameter at the rim and 85 mm in diameter at the base.

16. Wooler, Northumberland



1879, 1209.1772

The remains of this pot from Wooler in the Greenwell Collection are listed as a Food Vessel, but the form of the pot is not typical of a Food Vessel. It was found in a cist and bears more

tone, decoration and pedestalled flat base. The rim, however, is very unlike Beaker and is flat topped, and bends abruptly out from the wall. Its squared-off edge overhangs the exterior of the vessel. The only example of this is Clarke's N/MR type, but it can also draw similarities to the moulded rims of Impressed Ware and Food Vessel (which may be why it was placed into the latter category in the first place). The neck then narrows and then the walls bend out to a very rounded belly and finally in to a flat pedestalled base. Inside the transition is gradual. A heavy slip has been applied to this vessel and striations show it was then wiped in a horizontal direction. The walls are red with a thin, brown overtone and the core is also red. The walls of this vessel are thick for Beaker at 11 mm, but the fabric is very gritty with crushed white and light gray lithic material that is 4-5 mm wide and smaller – as seen with Beakers in the region. The decoration on the rim and rim edge consists of whipped cord triangular shapes and a zigzag pattern of whipped cord under the rim fills the neck. Under this, horizontal lines of cord encircle the neck and then on the body there are alternating diamonds, a panel of X-shapes, and a double zigzag, each separated by horizontal rows. The lower half of the vessel is plain. The motifs used on this pot are very typically Beaker in their arrangement, following Clarke's Northern Series; however, they are done using whipped cord, when Beaker is usually decorated using comb. It is not unheard of for Beakers to be decorated using cord and this pot, with its decoration restricted to the upper half, and its out-bending rim and pedestalled base, draws parallels to Clarke's N/NR (Northern North Rhine) category. The colour of the walls and the types of inclusions used are also found with Beaker, but this pot is much coarser and the walls are much thicker. Given this evidence, it would seem that this pot represents a Beaker/Food Vessel hybrid, as described by Simpson (1965), which has recently been re-defined as Tyne-Forth Regional Ware, by Millson et al. (2012). These are local pots that were influenced by outside ideas, but remain part of an ingrown tradition. As the fabric is so gritty, it is also very friable and only about 70 % of this pot remains. Determinations could be obtained, though, and it is about 250 mm tall, 200 mm wide at the rim and 75 mm wide at the base.

APPENDIX 5 – BEAKERS*

1. West Links, North Berwick, East Lothian



X.EG 91

In the cist of a child inhumation, the Beaker, NMS X.EG 91 was found. The sherds of a second vessel, NMS X.EE 98, are listed from the same location as the first, although they are not mentioned in the 19th century document.

NMS X.EG 91 consists of several sherds from near the rim of a vessel that is heavy and thick and has a fabric and surface treatment more like a Food Vessel or Neolithic pot than a true Beaker. It has a flaring neck and rounded, simple rim. Clarke does not mention this pot in his corpus, although the shape of this rim and the decoration thereon is similar to his Northern group or Lanting & Van der Waals' Step 5. The walls of this pot are thick, 10 mm, which is more akin to Food Vessel, and the fabric is extremely gritty with very angular, dark gray lithic inclusions and angular red lithics that are 2-3 mm wide. This coarse fabric (for a Beaker) is then slipped on both sides with a very heavy slip that is brown on both sides and black in the core. Only a rim diameter of 160 mm could be determined from these remains. The decoration on this pot has been done using a rectangular-toothed comb with 1 mm wide teeth. On the neck are long, inverted triangles that are filled with horizontal lines and the body sherd has horizontal panels of cross-hatching with horizontal lines as borders. These sherds represent only about 10 % of the original pot and there is manganate on the rim and surfaces.

*The numbering in this appendix correlates to the site numbers on Map 6.3

The sherds of NMS X.EE 98 come from the base and wall of a coarse pot with an abrupt transition and a flat base. The fabric is very gritty with dark gray, angular lithic inclusions that are 3-5 mm wide and up to 9 mm wide. White flecks of a lithic material were also noted. These are slipped as well and the exterior is reddish brown and the core is dark brown. No dimensions of the original pot could be discerned. Since these sherds represent about 5 % of the original pot, the only decoration that could be made out from these remains were a row of fingernail impressions on the outside of one sherd.

2. Archerfield, Gullane, East Lothian

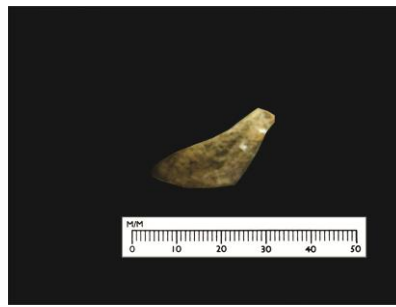


NMS X.HR 552

The sherds listed as NMS X.HR 552 come from a vessel with a flaring, simple pointed rim and a fairly straight neck. The walls are 7 mm thick and the fabric is very gritty with crushed gray lithic inclusions (1-2 mm) and angular, gray lithics (3-4 mm). There is a slip on both sides, although the inclusions are still visible, and the walls are yellow on the outside with blackening towards the rim, dark brown inside and gray in the core. The decoration on this pot has been done entirely with a square-toothed comb with 1.5 mm wide teeth. Horizontal rows are under the rim, followed by cross-hatching and further horizontal lines. On the body are alternating sets of three rows of horizontal lines and crosshatching. Clarke (1970, 516)

places all of the vessels from Archerfield into his E and AOC categories (this one would obviously be the former) and it would also fit Lanting & Van der Waals' Step 3.

NMS X.HR 553 is not pictured here, but it was examined. It remains as many small fragments from a vessel with a 7.5 mm thick walls and extremely gritty fabric. The fabric is composed of gray lithic inclusions that are 0.5 -3 mm wide, and it is slipped and fired to a brick red on the outside, brown on the inside and black in the core. Faint, square-toothed comb impressions were noted as the decoration, but no design could be discerned. Collectively, these sherds and fragments make up about a quarter of the vessel.



NMS X.HR 554, 4.1-2

The sherds all listed as NMS X.HR 554 do not represent the same vessel. They have differences in fabric, wall thickness and form. All of them were analysed together and sorted into fabric types that is thought here to represent the separate vessels. Since they were found in a mixed deposit, this should come as no surprise.

NMS X.HR 554, sherds 4.1-2, are a base and body sherd from a vessel with a flat base and walls that flare out from this base (photo 2). The walls are 6 mm thick and the fabric is sandy with many small inclusions, including white lithics that are 1 mm wide, and dark gray and black lithics that are 0.5-1 mm. This makes for a smooth fabric and it is slipped and fired to an orange/brown colour on the surfaces and brown in the core. This is an AOC beaker and so the decoration consists of double rows of fine twisted cord on the outer surface. It would fit Lanting & Van der Waals' Step 1. Less than 5 % of the original vessel remains.



NMS X.HR 554, 1.2-1.15

The sherds in this collection include three rim sherds and several body sherds from an AOC beaker vessel that had a simple, flared rim, rounded belly and smooth body. The walls are 7 mm thick and it is similar in fabric to NMS X.HR 554, 4.1-2, except for the decoration, which is entirely different. The fabric is sandy with many small inclusions, including dark gray lithics that are 0.5-2 mm. The vessel was slipped and it is light brown on the outside, reddish brown on the inside and brown in the core. It is decorated with a loosely-twisted cord with a 2.5 mm wide strand in horizontal rows on the vessel exterior and just inside the rim. These sherds represent about 20 % of the original vessel.

NMS X.HR 554, 2.1-2.12 is not depicted here, but consists of a rim and several body sherds from an AOC Beaker with a flaring rim. The wall thickness is 5 mm at the rim, but this increases towards the base. The fabric is sandy, but not as much as NMS X.HR 554, 4.1-2 or NMS X.HR 554, 1.2-1.15. There are many smaller pieces of red and white lithic that are 0.5 - 1 mm and quartz was also noticed. The vessel is slipped and it is reddish/brown on the outside, dark brown on the inside and in the core. The sherds are decorated with a slightly tighter twisted cord with a 1.5 mm strand, but is obviously a different pot than NMS X.HR 1.2-1.15 since there is not decoration inside the rim and the strand is thinner. This is smudged in some places, which indicates that it was wiped after the decoration was applied. The sherds make up about 10 % of the original pot.



NMS X.HR 554, 3.1-3.14

One rim sherd and several body sherds represent about 15 % of a vessel with 6 mm thick walls and a simple, out-turned rim (photo 2). The fabric is gritty, with sand, white lithics and crushed, black lithics (0.5-1 mm) that sparkle as inclusions. The vessel is slipped, but these are still visible, and it is dark brown on the outside, brown and black inside and red in the core. A very fine twisted cord with a 1 mm wide strand was used to decorate the pot in horizontal rows on the outside, and there are places where this is smudged, demonstrating that it was wiped after decoration.



NMS X.HR 554; HR 554, B, C, D.

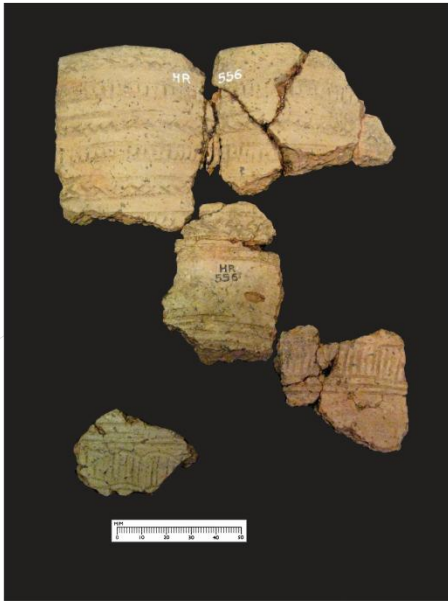
NSM X.HR 554 and NMS X.HR 554 B, C and D remain as sherds from an AOC Beaker that had a simple rim and walls 6 mm thick. The fabric is sandy with angular pieces of quartz (3 mm) and black lithic inclusions (1-2 mm). It has been slipped and the surfaces are

reddish/brown on the outside, dark brown inside and black in the core. Extremely fine twisted cord (0.5 mm strand) has been impressed on the outer wall in horizontal lines. Collectively, these sherds represent about 10 % of the original vessel.



NMS X.HR 555

The large sherds that are the remains of NMS X.HR 555 consist of a rim and two body sherds from a vessel with simple, upright rim and a rounded belly. The walls are 8 mm thick and the fabric is an evenly-mixed matrix of clay, angular, brown lithic inclusions, 1-2 mm wide, and flecks of white lithic material. There is a slip on the outside and it is red on the exterior, brown on the interior and gray in the core. The decoration has been done using a rectangular-toothed comb with 2 mm wide teeth. Under the rim on the outside is a panel of crosshatching, bordered at the top by two horizontal lines and at the bottom by a cordon. Below this is a second cordon and then there is a panel of triangles that are infilled with horizontal lines. This appears to give way to a central area that continues the infill of horizontal lines and that ends with inverted triangles filled the same way. About 60 % of this vessel remains and it has a heavy deposit of manganate on the outside. It fits best into Clarke's W/MR series or Lanting & Van der Waals' Step 5.



NMS X.HR 556, 13.1-13.30

Thirty sherds make up the remains of NMS X.HR 556. These come from a vessel with an insloping rim and straight neck with a rounded, globular belly. The walls are 8 mm thick and the fabric is very gritty comprising black, crushed lithic inclusions that are 2-3 mm wide, and mica (which may have been naturally part of the lithics that were used as inclusions). The pot was then slipped and fired to a red colour on all surfaces. The rim diameter was estimated to be about 140 mm, but this is taken with caution since it is fragmentary. The decoration was done using a rectangular-toothed comb with 2 mm wide teeth in at least 2 zones. On the neck there are panels of crosshatching, short, vertical lines and X-shapes, separated by rows of horizontal lines. The belly sherd displays a pattern made from horizontal rows bordering a row of short, vertical lines that have arcs above and below them. About 40 % of the original vessel remains.



NMS X.HR 557

The 23 sherds from NMS X.HR 557 are from a Beaker with a rounded belly (only larger fragments shown here). The walls are 10 mm thick and the fabric is coarse for a Beaker – it has many rounded, white lithic inclusions that appear to have been part of the clay naturally,

as well as crushed, black lithics that were deliberately added. NMS X.HR 557 is brick red on the outside and brown inside and in the core. It is decorated with a rectangular-toothed comb that had 2.5 mm wide teeth in horizontal lines, and there are patterns of incised herringbone and grooved lines as well. These sherds represent about 20 % of the original vessel.



NMS X.HR 558

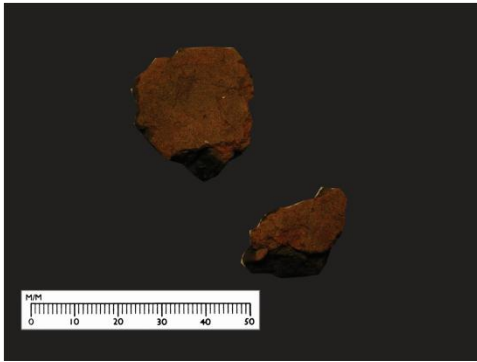
The above photo shows only the three largest of many sherds from a Beaker that is listed as NMS X.HR 558. The thickness of these sherds is 8 mm, on average, and the fabric is gritty with natural, white, rounded lithics (3 mm) and crushed, black lithics (1-3 mm). A slip covers these and the pot was dark brown with a black core. The decoration on these show rows of square-toothed comb with 2 mm wide teeth, as well as the use of a round-toothed comb. Diagonal lines forming triangles and rows of short, vertical lines were the only patterns that were discerned. In all, less than 10 % of the pot was present.



NMS X.HR 558, F-J; NMS X.HR 560, K.

One rim and five body sherds remain from a vessel with a squared rim that bends inwards slightly. The wall thickness is 7 mm and the sherds have a fabric that is gritty with about half of the matrix comprising angular, dark gray and black lithic inclusions that are 2-3 mm wide and white flecks of lithic material. A slip was applied to both sides and they are red on the outside, brown inside and in the core. The decoration on these sherds show a pattern using a rectangular-toothed comb with 2 mm wide teeth: there are several parallel, diagonal lines forming triangles around the neck, bordered at the bottom with horizontal lines. Below this

are panels of short, vertical lines and parallel rows of horizontal lines. The sherds here represent less than 5 % of the original vessel.



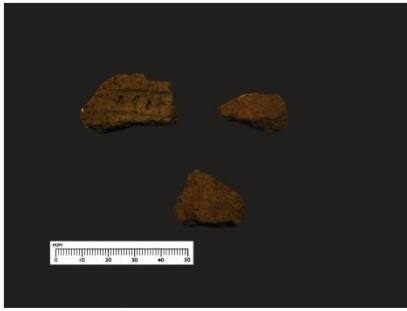
NMS X.HR 558, 24.5-6.

NMS X.HR 558, 24.5-6 is represented by a rim sherd and a body sherd from a vessel with a simple, thin rim (photo 2) and walls that were 9 mm thick. The fabric is sandy with gravelly stone in gray, black and pink (probably natural) and sand. A slip (or heavy wiping) was used to treat the surface and it is brick red with a black core. There is no visible decoration, but these sherds only make up about 2 % of the original vessel, so there may have been decoration on the parts of the vessel that are lost.



NMS X.HR 558, 24.2-4, 24.9

These four, heavily eroded sherds are 8 mm thick, on average, and all have the same sandy fabric with lithic inclusions that are light gray and dark gray and measure 2-4 mm wide. Although they are so worn, a slip was visible on the outside, and the colour is light yellow with blackening on the inside of one of the sherds. No decoration was discerned, but these do only represent less than 1 % of the vessel so it is not to suggest that there was no decoration at all.



NMS X.HR 558, 24.1-24.7-8.

Three sherds are listed all under the same category of NMS X.HR 558, 24, but it is possible that NMS X.HR 558, 24.1 (above left in photo) may be from a different vessel. The wall thickness of the sherds are 5 mm, although 24.1 is 8 mm, and the fabric is very gritty consisting of dark gray lithics that are 2-3 mm wide. This is moreso in 24.1 and the other two sherds are of a finer fabric, albeit with the same type of inclusions. All are slipped and they are red on all surfaces. Only 24.1 has decoration on it and this consists of two horizontal grooves with a row of oval impressions in between (possibly birdbone). Together, they represent less than 5 % of the pot.



NMS X.HR 559

These six sherds come from a vessel with a squared rim and a fairly long, straight neck. The walls are 9 mm thick and the fabric is fairly gritty consisting of prepared, white, crushed lithic inclusions, 2-3 mm wide, and angular, dark gray lithics, 1-2 mm wide. The surfaces are slipped and burnished to a sheen and they are red on the outside, brown inside and dark brown in the core. the decoration has been done using a square-toothed comb with 1.5 mm wide teeth. There is a zone under the rim with crosshatching that is bordered at the top and bottom by horizontal lines. On the body another zone has a panel with opposing triangles that are infilled with horizontal lines that create a plain zigzag pattern. The sherds are larger than many at the site, but they only represent about 5 % of this vessel.



NMS X.HR 561

A body sherd and four smaller fragments were found from a coarse vessel that had 10 mm thick walls. It is not certain that this is from a Beaker. The fabric is sandy consisting of angular, black lithics, 3-5 mm and up to 9 mm, sand and evidence of burnt out organic inclusions. The vessel had been slipped on both sides and it is black and sooty now. The only decorative motif that was visible was a series of finger-pinched V-shaped impressions. These sherds represent less than 1 % of the original vessel.

3. Hedderwick, Dunbar, East Lothian

The site of Hedderwick is a mixed deposit that contained sherds from vessels from the Neolithic and Bronze Age and what Callander (1928-9: 35) describes as, "...the late Stone Age or...the overlap period between it and the Bronze Age." The selection that was available for study included sherds from Impressed Ware, Grooved Ware, Tyne-Forth Regional Ware, Beaker, Food Vessel and Collared Urn vessels, and each is described in its respective section. Of interest in this section are the remains of 6 Beaker pots; they are registered in the NMS as NMS X.BM 66, NMS X.BM 68, NMS X.BM 71/NMS X.BM 74/NMS X.BM 75 (which appear to be from the same pot), NMS X.BM 73, NMS X.BM 77 and possibly NMS X.BM 59. Clarke (1970, 516) classifies NMS X.BM 12-91 as AOC and E Beakers; however, this is incorrect according to the NMS special collections register, which catalogues only the Beaker sherds: NMS X.BM 64, 65, 67, 69, 70 and 76 in addition to those that were examined. All of the sherds fit into Lanting & Van der Waals' Step 1-2 categories.



NMS X.BM 66

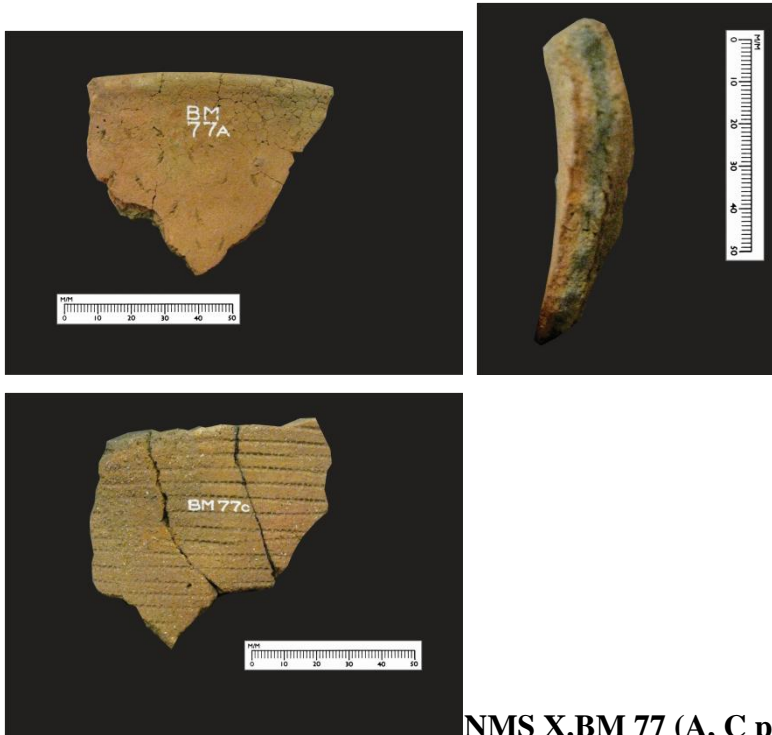
The vessel BM 66 is a base fragment from a Beaker with a concave base and a transition inside that is gradual to a flat base. The wall bends out toward the belly, but the setting of the belly or its angularity is not discernable. The walls are 8 mm thick and the fabric is gritty with grog, sand, red and gray angular, prepared lithic inclusions that are 1-2 mm wide, and gravel. A slip was placed over this and the walls are reddish/brown on the outside, white/brown on the inside and red in the core. The base diameter is 85 mm. The only decoration that could be seen was horizontal rows of very fine twisted cord. This sherd represents only about 1 % of the original pot.

NMS X.BM 68 is not pictured here, but it is a rim sherd from a vessel with a flaring, simple rim that has a concave neck and a cordon at the base of this; the wall then bends in again. This feature is not typically Beaker and the only example that is similar to this is the vessel from F102 at Cheviot Quarry, which has been placed in the ‘Other contemporary pottery’ category in this thesis due to its abnormal fabric, form and lack of decoration for Beaker. This sherd, however, has a fabric that is found in the other Beaker sherds at this site as it is sandy with small lithic inclusions and a slip on the surface. The walls are 8 mm, which is relatively thick, but the decoration has been done with a square-toothed comb in arcs under the carination and under the rim inside following the Beaker tradition. So although this sherd may be less Beaker in form, it is Beaker in fabric and decoration, which may indicate a mixing of ideas. The surface of the sherd is brick red and the core is black. It represents less than 1 % of the original vessel.

The sherds NMS X.BM 71, NMS X.BM 74 and NMS X.BM 75 are all small sherds and may represent separate vessels, but their fabrics, colour and wall thicknesses are so similar that it could be argued that they come from the same pot or the same batch of clay. NMS X.BM 71 is a rim sherd of an everted rim that is practically rolled-over (although not to the extreme that is seen on Carinated Bowl pottery). It is 6.5 mm thick under the rim and has a sandy

fabric with black lithic material that is up to 1 mm wide. A slip has been put over this and it is brick red on both sides and black in the core. A groove is under the rim on the outside and there are two more parallel grooves under the rim on the inside. NMS X.BM 74 is a body sherd that is 7 mm thick that appears to be from the upper part of the vessel, near the neck, and it has a sandy fabric with black lithic inclusions that are 1 mm or smaller and red, angular lithic inclusions that are 2-3 mm wide. It is also slipped and fired to a brick red on both sides and it is black in the core. The decoration consists of horizontal rows of left-handed fingernail impressions. NMS X.BM 75 is also a body sherd, possibly from near the base, that is 8 mm thick and has a sandy fabric with angular, black lithic inclusions that are 2-3 mm wide and white lithic flecks. It also was slipped and fired to a brick red on both sides and black in the core. The decoration consists of parallel grooves, some of which converge, creating triangles. These sherds are placed in the Beaker category in the collections register at the NMS, but it could be argued that they bear traits from both Neolithic and Beaker traditions. The fabric is similar to the other Beaker pottery found on this site and the flaring rim and red slip is also typical, but the type of decoration is more similar to Grooved Ware. The Beaker pottery here tends to be AOC or Clarke's E group that has patterns of herringbone and cross-hatching, whilst these sherds have been impressed with rows of fingernail impressions and converging grooves. Fingernail impressions are seen on Beakers elsewhere and grooving is employed, but not usually in this way and so this(these) pot(s) may represent another hybrid, which should not be surprising since it is at a multi-phase site.

NMS X.BM 73 is similarly a body sherd that seems to mix traditions in its characteristics. It is listed in the museum catalogue as Beaker, but it is rather thick-walled at 10.1 mm, and the fabric is typical of Food Vessel as it is extremely gritty with lithic inclusions; however, these are crushed, gray inclusions that are 2-3 mm wide and there is evidence of organic inclusions as well, which is often found in Beaker. The pot was slipped and it is brick red on both surfaces, but the decoration consists of rows of deeply-set, opposing fingernail impressions that create pinched sections.



NMS X.BM 77 (A, C photographed here)

NMS X.BM 77 remains as many small sherds (a-g) from the same vessel that had a slightly out-turned, simple rim and a rounded belly. The fabric is very sandy with many angular, gray lithic inclusions that are 0.5-1 mm wide. The pot was slipped on both sides and the surfaces are brick red with a black core. The wall thickness varies from 5 mm to 8.5 mm and so these may represent more than one pot made from the same clay. The decoration also varies (which is found on Beakers) and there are twisted cord maggot impressions scattered across the surface on the rim sherd (photo 1), rows of square-toothed comb (1 mm wide teeth) on the belly (photo 3), and grooved lines and scattered fingernail impressions elsewhere on the body (not photographed). Some of the body sherds were not decorated at all. Each of these sherds represent less than 0.5 % of the original pot and if they all do come from the same pot, they would only amount to about 5-10 % of a typical Beaker.



NMS X.BM 59

Finally, NMS X.BM 59 is catalogued as Impressed Ware, but it is believed here that it should be categorised as Beaker. This is because of its fabric, wall thickness and surface treatment. It is a body sherd that is 6.5 mm thick and was made from clay that was mixed with grog and crushed, gray lithic inclusions that are 2-3 mm wide. These are covered by a slip that is yellow/brown on the surfaces and black in the core. The decoration consists of rows of herringbone that was impressed using a square-toothed comb with 1 mm wide teeth. The presence of this motif would place this vessel into Clarke's E category or subsequent northern group and it would fit Lanting & Van der Waals' Steps 3 or 4. The sherd represents about 1 % of the original pot.

4. Drem, West Fenton, East Lothian

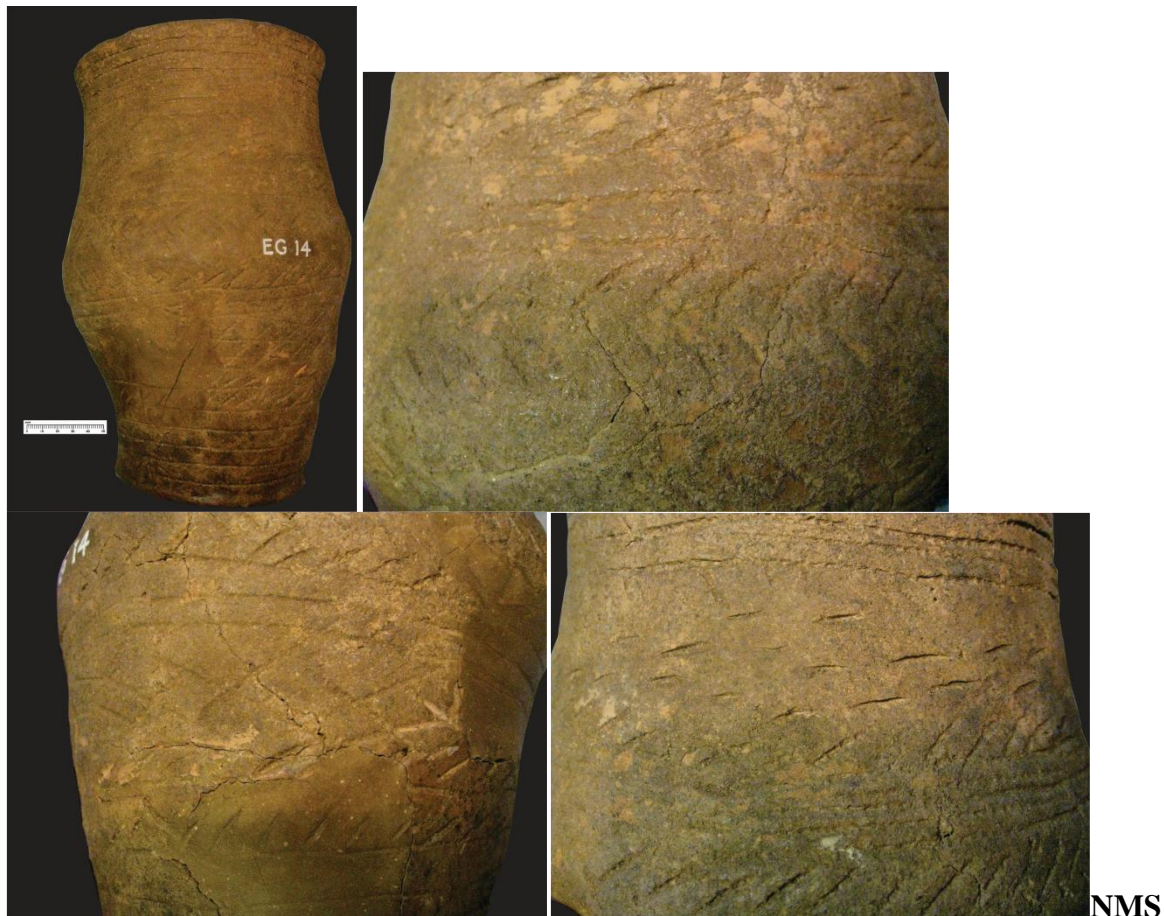


NMS X.EG 56

This Beaker from Drem, West Fenton is a particularly beautiful example and is unique amongst all other Beakers of the study area. Clarke (1970, 516) places it in his N3 category, the most developed of the northern group, and Lanting & Van der Waals' Step 6 with its cylindrical shape, globular belly and broad-banded decoration. However, this pot is much more skilfully done than any other from these categories in the region and is the work of an artist – particularly as it displays a realistic image rather than geometric patterns. NMS X.EG 56 is symmetrical and has thin walls, 7.5 mm, and a squared, simple rim with a straight neck that only slightly bends outward. The gentle contours of the vessel include a rounded belly with a maximum width of 12 cm and a flat base, with only the slightest concavity. Inside, the

transition is abrupt to a flat base with a central cone. Only minor traces of scraping can be seen inside the neck. The fabric is hard, with a slightly sandy texture, and it contains about half dark gray and white, angular lithic inclusions that are 1-2 mm or smaller. A slip was placed overtop of these and the walls have been buffed to a shine. It is brick red on the outside and brown inside. The core colour could not be determined since the pot is still complete. NMS X.EA 56 is 19 cm tall, 130 mm in diameter at the rim and 75 mm in diameter at the base. It has a calcium build-up near the rim on the outside and a black residue is inside this pot on one side and near the base. The decoration on this pot has been done in three zones: the neck, belly and base. A rectangular-toothed comb, with 2 mm wide teeth, and grooving were employed. The first zone has three sets of horizontal rows of comb and the resulting two blank panels are further split into vertical panels of differing decoration. This includes a rectangular motif whereby the edges of the rectangle are feathered with short, diagonal lines (photo 5), a rectangular panel that is filled with zigzag patterns grooved in, and a vine pattern made from opposing, vertical rows of incised herringbone. The second zone is of particular interest. Here, the horizontal rows of comb form upper and lower borders to a series of vertical panels that repeat the feathered rectangles of the neck, but also sections where vertical lines with grooved diagonal lines have been used to create the false relief of a plant (photos 3, 4). It is possible that this may represent six-row barley – a plant known to have been grown in Beaker times and the most common macrofossil on Beaker sites. The base zone again has horizontal lines of comb for borders, but the sections in this area are more abstract and consist of zigzags, herringbone and lozenge shapes. When this pot was described by Childe, the decoration was described as geometric and the vine patterns were seen as vertically-placed herringbone. Indeed, if the focus is on the part that has been impressed, it appears to be so, but this pot may be decorated in such a way that the impressions are not the motif – they are the background. By cutting out these areas, the false relief of a scene this potter was familiar with, that of rows of barley, may be revealed, which provides a unique glimpse into the world of the people who made Beakers. It is the only example in the entire study area that is so well-made and that has decoration such as this.

5. Drem, Haddington, East Lothian



X.EG 14

The Beaker from Haddington is a very crudely-made, lumpy, thick-walled (9mm) and lop-sided vessel. The rim is slightly flared with a concave neck and then the walls bend quickly out to an angular belly and then abruptly in to a narrow base with a slight pedestal. Inside, the transition is gradual and the base eroded. The fabric of this vessel has a sandy texture with a natural grittiness showing through. There are rounded gray lithic inclusions, 2-3 mm wide, that erupt from the walls of the vessel on the inside. The exterior wall has been fired to a dark brown and the inside is light brown with a reddish undertone. NMS X.EG 14 is 21 cm tall, 120 mm in diameter at the rim and 90 mm in diameter at the base. The decoration on this is done in two zones, but differs on one side from the other and the first side appears to be the work of a much more skilled and experienced person than the second. The first side has horizontal rows of comb (rectangular-toothed, 2 mm wide teeth), three rows of fingernail impressions, a row of diagonal lines of comb, five more horizontal rows and a final row of diagonal lines. On the other side of this pot in the first panel, the fingernail impressions make way to a wide zigzag pattern. The second zone, near the base, has a row of diagonal lines in

comb, three horizontal rows, two more rows of short, diagonal lines and then horizontal rows to the base. However, again the pattern changes and on the other side of the pot, the two rows of diagonals are replaced by half-hazard cross-hatching. The decoration on this vessel is curious. Where as many of the impressions are evenly-spaced and of even depth, in specific areas the motif changes to less well-executed patterns. For example, in the first zone, the herringbone (photo 2) changes to fingernail impressions (photo 4), and in the second zone, the diagonal rows is replaced by cross-hatching (photo 3). It would seem that this is an example of someone learning how to make a Beaker. The pot itself is not well-made, and the placement of the decoration is as if the teacher was showing the novice what to do and then handing it to them to try. Once this was done, the surface was smoothed over (as seen by some smudging of the decoration) and the pot fired. About 70 % of this pot survives and it has been reconstructed in places, but a sooty deposit could be observed in the base. Clarke (1970, 516) classifies this as a N/NR Beaker.

6. Kirkhill Braes, Dunbar, East Lothian

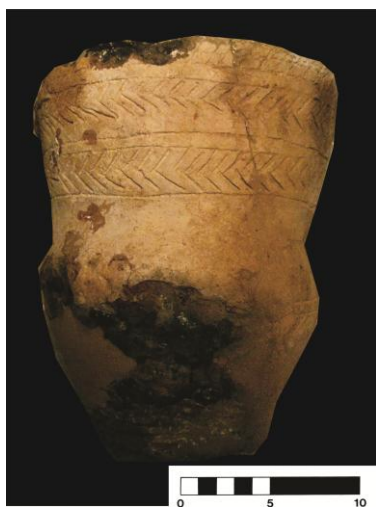


NMS X.EG 93

The vessel from Kirkhill Braes is classified by Clarke (1970, 516) as N1/D and it fits into Lanting & Van der Waals' Steps 2/3. It is a small, squat pot with a simple rim that gently flares out, with a wide, straight neck and a very slightly rounded, low belly (near the base). It has a flat base with a pedestal and inside the transition is gradual/abrupt to a flat base. The walls of this pot are 7.5 mm thick and the fabric is extremely gritty with dark gray, crushed lithics (less than 1 mm – 2mm wide). A heavy slip has been applied to the outside and the pot is brick red on both sides with a black core. It is 13.6 cm tall, 120 mm in diameter at the rim and 90 mm wide at the base. The decoration on this pot consists of three horizontal grooves just under the rim, followed by a panel of cross-hatching. There are then two further zones of

decoration – just above the belly and at the base. The belly zone has four horizontal rows of round-toothed comb (1.5 mm teeth), two horizontal grooved lines, followed by seven more horizontal rows of comb. The final panel comprises three widely-spaced horizontal rows of comb, followed by six more that are more closely-spaced. A large portion of the rim is missing on this pot and so only about 70 % of it remains, but otherwise, it is in good preservation.

7. West Pinkerton, Dunbar, East Lothian

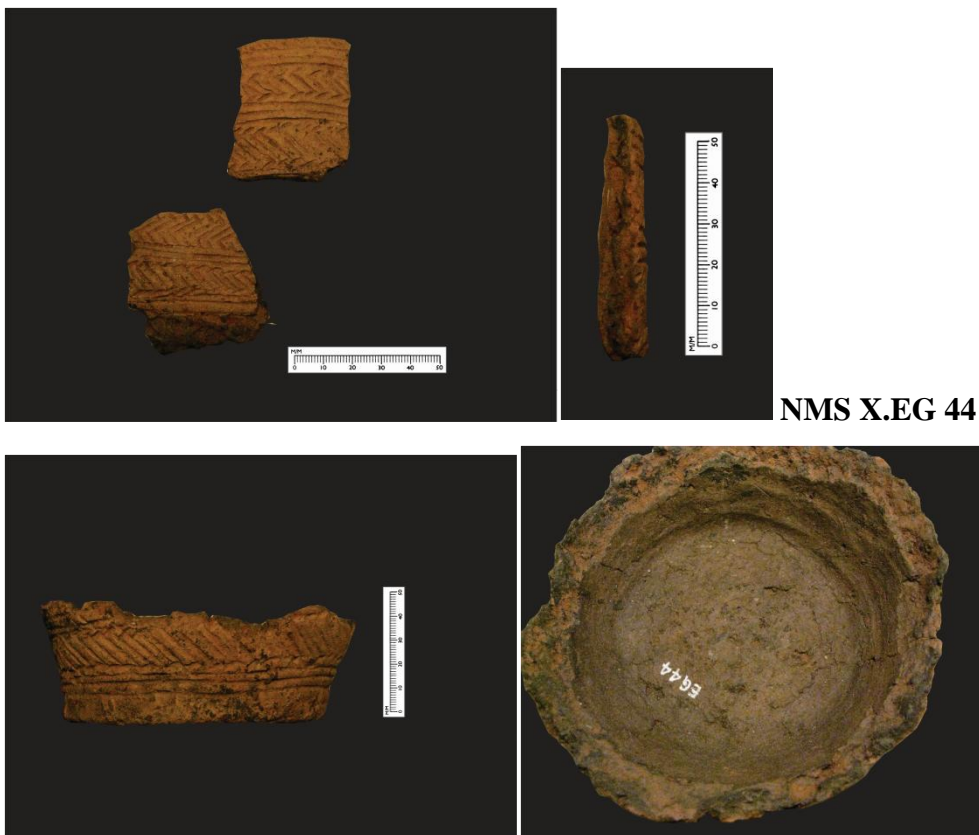


NMS X.EG 75

This badly eroded Beaker has a tall rim that has squared edges and bends inward slightly. The neck makes up about half the height of the pot and then it bends abruptly out to a rounded, but prominent belly that has a maximum width of 12.5 cm. The walls then narrow quickly to a pedestalled, flat base. Inside, the transition is abrupt with a central cone. Clarke (1970, 516) places this pot into his N3 category and, based on the vessel shape and decoration (although sparser on this pot) it would fit best into Lanting & Van der Waals' Step 5 or 6. The walls of this vessel are 8.5 mm thick and the fabric, although difficult to discern because of the way it has been reconstructed, contains grog and angular lithics that are about 2-3 mm wide. A pastey fabric was observed, where it was exposed. The decoration consists of X-shaped impressions on the rim top and then three panels on the vessel wall, all done with a square-toothed comb with 1 mm wide teeth. The first neck panel has two horizontal rows of comb with diagonal lines between them and then a row of herringbone to the right, followed by two more horizontal rows and herringbone, also to the right, and a final horizontal row. The second panel at the belly has two horizontal rows, herringbone, and two more horizontal

rows. And the final zone at the base simply has four horizontal rows of comb. The walls of NMS X.EG 75 are the sought-after brick red colour and the core is black. It is 16 cm tall, 150 mm wide at the rim and 82 mm wide at the base. About 80 % of this pot remains, as many parts have eroded away, and it has a heavy deposit of calcium on one side, both inside and out.

8. Broxmouth Waird, Oxwell Mains, Dunbar, East Lothian



The remains from Broxmouth Waird are those of a Beaker with a simple, squared rim (photo 2), a straight neck, rounded belly and slightly pedestalled, slightly concave base (photo 3). This is a finely-made vessel and the contours are gentle and rounded. It has thin walls, only 7 mm, and inside the transition is abrupt to a slightly convex base. Striations from scraping the perfect transition are visible in the vessel base (photo 4). The fabric of this pot is somewhat gritty and dark gray, angular lithic inclusions, 1-3 mm wide, and grog were added to a clay

that had natural rounded, red lithics, 3-4 mm wide. A slip covers both sides and it is brick red on the outside, dark brown/gray on the inside and black in the core. Due to the fragmentary nature of the remains, only the base diameter, which is 84 mm, could be discerned. The decoration on this pot is finely done with a square-toothed comb with 1 mm wide teeth. A row of short, diagonal lines surrounds the rim on the outside, followed by three horizontal rows, a row of vertical zigzags and then a bordering, horizontal row. The same alternating pattern can be seen on the belly to the base and at the bottom, a zigzag, followed by a row of short, diagonal lines in the opposite direction to the rim and three horizontal lines, finishes the pattern. Any evidence of zonal decoration could not be determined because this pot remains only as a few sherds and a base, making up only about 10 % of the vessel. A heavy deposit of manganate was also noted on the bottom of the base, suggesting it had been deposited in a wet place. Clarke (1970, 516) places this pot in his N2 category and it would comfortably fit Lanting & Van der Waals' Step 5.

10. East Barns, East Lothian

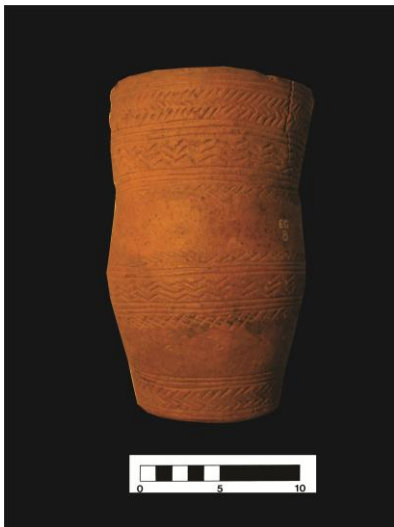


X.EG41

NMS X.EG 41 has a simple, squared rim that flares outwards and has a narrow neck. The walls are sinuous in profile and bend out to a rounded belly that reaches a maximum width of 13 cm and then narrows to a slightly concave base. Inside, the transition is abrupt to a flattened base with a very slight central cone. Heavy striations from scraping the upper ½ of the vessel were noted inside (photo 2). Externally, the pot has been slipped and wiped, possibly with straw or grass as one large impression of straw is visible on the shoulder. The

walls of this pot are 7 mm thick and the fabric is fairly gritty with white and gray, angular lithic inclusions and sand. The walls are hard and well-fired and NMS X.EG 41 is red on the outside and yellowish red on the inside. It is 19 cm tall, 140 mm in diameter at the rim and the base diameter is 85 mm. The decoration was done in six zones and are made of lozenge shapes (possibly birdbone ends) and impressions from a very fine-toothed comb. The first zone is on the upper neck and has two rows of offset lozenge-shapes, followed by four horizontal lines and a further two rows of offset lozenges. The second zone is on the neck and is only four horizontal lines of comb. The belly zone repeats the upper neck zone and below this is four horizontal lines and a row of lozenges with diagonal lines of comb coming out their tops make up the fourth zone. The fifth zone is near the base and is a mirror image of zone four and the final zone on the base is composed of horizontal lines. This vessel is categorised by Clarke (1970, 516) as N/MR and by Lanting & Van der Waals as Step 3. The entire pot has survived, but it has a heavy deposit of calcium and some manganate on both surfaces. A darkened spot on the bottom of the inside of the vessel was observed to go up one side of the pot.

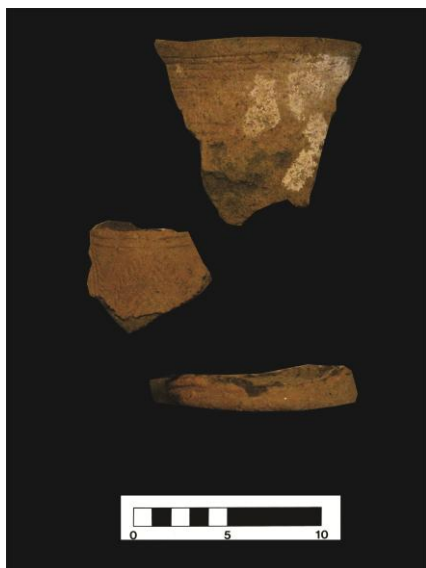
11. Windy Mains, East Lothian



NMS X.EG 8

The Beaker from Windy Mains, NMS X.EG 8, has a pointed rim and a fairly straight neck that narrows only slightly at its base before bending out to an angular belly. The walls, which are 8 mm thick, then narrow to a slightly concave, pedestalled base. Inside, the transition is abrupt to a flat base. The entire pot is very straight with only gentle contours and the rim, belly and base are all roughly the same width. Clarke (1970, 516) regards this as an N3

vessel and Lanting & Van der Waals' system would see NMS X.EG 8 comfortably within Step 5. The fabric is gritty with dark gray and cream coloured, crushed lithic inclusions that are 1-2 mm wide. Either a light slip or substantial wiping was done to smooth the walls to hide these, and the pot was fired to a reddish pink colour on the outside, orange/red on the inside and dark gray in the core. The decoration on this pot was done using a square-toothed comb that had 1 mm wide teeth. There are three zones of decoration at the neck, belly and base. On the neck, there is a panel of vertically-set zigzags, horizontally-set zigzags and cross-hatching, each separated by horizontal lines. The belly has a cross-hatched panel, followed by horizontal lines, then several rows of zigzag, horizontal rows and another panel of cross-hatching. And the base zone has simply a panel of vertically-set zigzags, bordered at the top and bottom by horizontal lines. NMS X.EG 8 is 16.6 cm tall, 112 mm wide at the rim and 77 mm wide at the base. About 85 % of the original pot has survived and some inclusions have fallen from the surface.



NMS X.EG 9

The sherds that make up NMS X.EG 9 are from a vessel with a rounded, simple rim and high, concave neck. The walls then bend out to the belly immediately under this and the base is flat with a pedestal. Light impressions of straw were noted on the base. The walls of NMS X.EG 9 are 8.5 mm thick and the fabric of the pot is very gritty comprising crushed dark gray and white lithic inclusions, 1-2 mm wide (and smaller), and sand. A slip may have been on the outside of this pot, but it is eroded now. Clarke (1970, 516) places this vessel into his N/NR

category and it would fit comfortably into Lanting & Van der Waals' Step 3. The decoration on NMS X.EG 9 was done entirely in square-toothed comb with 1 mm wide teeth in zones. Under the rim are five horizontal rows with a row of short, diagonal lines forming a 'feathering' pattern. At the neck are two horizontal lines. The one body sherd shows a pattern with two horizontal rows followed by a pattern of triangles made from parallel, converging diagonal lines and then lozenge impressions around the outside lines of the triangles to create a 'feathering' appearance. A final horizontal line was noted on the base. The surface of this pot is red on the outside, white/gray inside and the core is black. The height could not be determined since only 20 % of the pot still exists, but a rim diameter of 120 mm could be measured and the base is 85 mm wide. A heavy deposit of calcium was also noted on the outside of the rim.

13. Ruchlaw Mains, Stenton, East Lothian



NMS X.EG 124

NMS X.EG 124 is a very large Beaker with a flat rim top and rounded neck that narrows in, then an elongated body that has a long, but rounded shoulder. The base is slightly concave and inside transition is abrupt to a flat base. The walls are thicker at 10.1 mm and the fabric is somewhat gritty with crushed, light gray lithic inclusions and sand. The pot is slipped and wiped on both sides. It is reddish brown on the exterior surface, dark brown inside and black in the core. NMS X.EG 124 is decorated entirely with a square-toothed comb with 1.5 mm teeth. This is done in three zones: the neck/shoulder, lower belly and the base. On the

neck/shoulder zone, the rim has two rows of zigzag with a row of vertical lines inside, which creates a diamond pattern with vertical line infill. Under this are horizontal lines along the neck, then vertically positioned zigzag, horizontal lines and cross-hatching. In the belly zone, panels of cross-hatching and horizontal lines border the top and bottom of a herringbone panel. At the base, a cross-hatched panel has horizontal lines to the top and bottom. NMS X.EG 124 is not listed in Clarke's corpus, but it fits his N1/D category, based on vessel shape, decoration and position of motifs. Due to these factors, as well as the rarer horizontal lines at the neck motif, NMS X.EG 124 fits into Lanting & Van der Waals' Step 4 category. It is approximately 21 cm tall and 150 mm wide at the rim. The base is 86 mm wide and there are manganate and calcium deposits on the rim and on the one side. About 85 % of this pot remains.

14. Nunraw, Garvald, East Lothian



NMS X.EG 116

The Beaker from Nunraw is a small pot with a wide rim and neck that makes up half of the vessel. The neck is wide and then the belly quickly bends out to 12 cm and then in down to a flat, pedestalled base. Clarke (1970, 517) classifies this pot as N2 and Lanting & Van der Waals place it in Step 5. NMS X.EG 116 has walls that are 8.5 mm thick and the fabric is gritty with crushed black lithics, 1-3 mm wide, used as added inclusions. There is a heavy slip and the pot is burnished. The pot surfaces are brown, but there are many blackened areas and the core is black and sooty. White material has been used in the decoration to make it stand out. The pattern extends from rim to base, but three repeating panels can be discerned. These include two herringbone rows with a row of short vertical lines in between, all separated by horizontal lines. These are on the rim, belly and base with a blank panel in between (but not so large as to create full, separate zones). All of the decoration is done with

a square-toothed comb with 1 mm wide teeth. About 99 % of this pot remains as it is eroded in some places. It has a heavy deposit of calcium on the rim and very heavy deposits of manganate inside. A black and ashy residue was noted inside that may be the substance the pot once held. NMS X.EG 116 is only 15 cm tall. It is 130 mm wide at the rim and the base diameter is 45 mm.

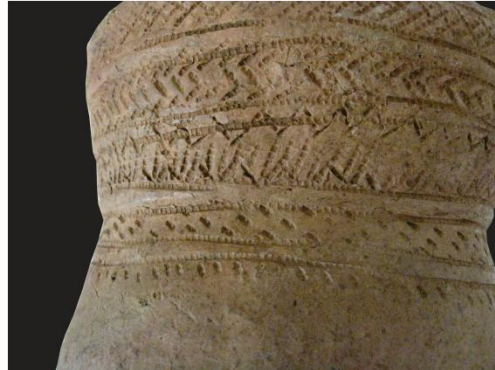
15. Innerwick, Thornton, East Lothian



NMS X.EG 74

The Beaker from Thornton, NMS X.EG 74, is a large pot with a rounded rim top and gentle curves. The rim flares slightly out, with a wide neck, and a rounded belly that is 14.5 cm wide. The walls, which are 8.5 mm thick, then narrow to a pedestalled, flat base. Inside, the transition is abrupt to a slightly convex base. The fabric of NMS X.EG 74 is fairly gritty with crushed black lithics, 1-2 mm wide, and angular black lithics, 3-4 mm, as added inclusions. The pot is slipped and wiped and has light brown surfaces and a black core. It is 21 cm tall, 155 mm wide at the rim and 90 mm wide at the base. The decoration on this pot was done in two zones: at the neck and the lower belly. The neck has two deep, horizontal grooves, then a series of horizontal rows of comb. Two panels of randomly-placed stabmarks fill the space between four of these horizontal rows. The lower belly has a panel of the stabmarks with horizontal comb borders, and then a panel of parallel, converging diagonal lines that form a zigzag. This is bordered at the bottom by two more horizontal lines and the upper part is infilled with stabmarks. NMS X.EG 74 is nearly complete and there is manganate on the surfaces and calcium on the rim.

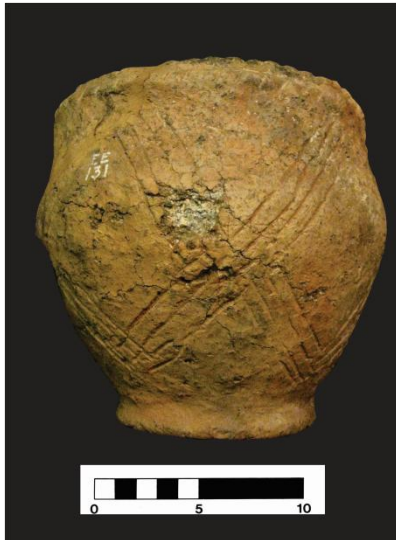
16. Thurston Mains, Innerwick, East Lothian



NMS X.EQ 479

The Beaker from Thurston Mains is a well-made and symmetrical vessel that was found in a cist with the inhumations of two young women. It has a rounded neck that narrows at the bottom and a belly with angular curves that flare out to 12.5 cm at the maximum width. The base is pedestalled and concave and inside, the transition is abrupt to a flat base with a low central cone. The walls are 8 mm thick and the fabric is gritty with many crushed, dark gray lithic inclusions, 3-4 mm wide. The surfaces of the pot are medium brown with red patches and it is 19.2 cm tall, 134 mm in diameter at the rim and 75 mm wide at the base. The decoration is done all in square-toothed comb that is 4 cm long and has 1 mm wide teeth. There are three zones: the neck, the lower belly and the base. On the neck are panels of cross-hatching, zigzag, vertical lines, and maggot impressions, each divided by horizontal rows and the bottom of this zone is feathered by diagonal lines. A zigzag pattern has then been impressed on top of this design in the middle of the zone, half-hazardly on the horizontal rows (photo 2). The zone on the lower belly is a symmetrical design of horizontal lines, with feathering, bordering a zigzag pattern at its top and bottom. On the base is further feathering, followed by horizontal lines and then a double row of zigzag. NMS X.EQ 479 has survived entirely; however, there is a heavy deposit of calcium near the rim on one side. Clarke (1970, 516) classes this vessel as N3 and it fits into Lanting & Van der Waals' (1972) Step 5.

17. Skateraw, Innerwick, East Lothian



NMS X.EE 131

The vessel NMS X.EE 131 was described by the original specialists as a Food Vessel/Beaker hybrid, but Clarke (1970, 517) categorised it as S4. Aside from the placement of the shoulder (which would be comfortable in a Food Vessel description anyway), this pot shares its characteristics more with the Food Vessel tradition than with Beaker. It would seem that its provenance of a cist with a flexed inhumation burial has influenced its classification. NMS X.EE 131 has an insloping, bevelled rim with a flat rim edge and straight neck. The walls then widen to the shoulder and immediately narrow to a flat, very pedestalled base. The transition inside is abrupt to a flat base. The walls are a typical thickness for a Food Vessel at 10.4 mm and the fabric is extremely gritty consisting of angular, dark gray lithic inclusions that measure 4-5 mm wide. The pot is heavily slipped and buffed and it is reddish/brown on the surfaces with blackening inside. It is 12.4 cm tall, 120 mm wide at the mouth and 75 mm wide at the base. The decoration on this pot consists of grooved, parallel, diagonal lines that converge on the vessel to form four diamonds around it. There are also diagonal lines on the rim edge and under the rim on the outside of the pot. About 97 % of this pot remains as it is eroded in places and a heavy calcium deposit is near the rim.



P.R.Ritchie 1958

The second pot found at Skateraw, almost 20 years later, is labelled as P. R. Ritchie 1958 in the NMS. This pot truly is a Beaker and it is catalogued by Clarke (1970, 517) as N3 and would fit Lanting & Van der Waals' Step 6, based on decoration and shape. It is a large pot with a flat rim that has squared edges and a neck that bends gently outward and an angular shoulder. The pot itself is angular and elongated and narrows to a concave base that is flat inside with an abrupt transition. The maximum width at the belly is 15 cm. The walls of this vessel are 10 mm thick and the fabric is gritty with angular dark gray and black added lithics that measure 1-2 mm wide and 2-4 mm wide (at a ratio of 50: 50). These inclusions protrude from both surfaces and the pot is reddish brown on the external side and brownish red on the internal surface. The decoration has been done in three zones: from the rim to the neck, from the neck to the lower belly, and on the base. The neck decoration consists of horizontal lines, infilled with diagonal lines in opposing directions to create a zigzag effect. The belly zone has a mirror image design of triangles infilled with horizontal lines, which are bordered at the top and bottom by horizontal lines that encircle the pot. The centre of this is divided with a panel of cross-hatching. The base zone has two more horizontal lines and then inverted triangles that are filled with horizontal rows. All of this is done in comb. This pot has been reconstructed in some places, but most of it has survived. It is 21.7 cm tall, 162 mm wide at the rim and 72 mm wide at the base.



NMS X.EG 105

The pot found in 1972 by the A1 was in a cist that was buried 2 m deep. The vessel, NMS X.EG 105, is a Step 3 Beaker by Lanting & Van der Waals' criteria and would fit Clarke's northern group, possibly N1/D, although this was found after his 1970 publication. It has a squared rim that flares outward, with a narrow neck, and a wide belly and almost diamond-shaped profile. The base is flat and pedestalled and the transition inside is abrupt to a flat base with a central cone. A seed impression was noted on the shoulder (photo 2) and further impressions are on the base (photo 3). The walls of this vessel are 9 mm thick and the fabric is gritty with crushed gray and red lithics, 1-3 mm wide, added as inclusions. It is slipped on both sides. NMS X.EG 105 has red surfaces with blackened patches on both surfaces. The decoration was done in three zones at the neck, belly and base. In the neck zone, horizontal grooves have three panels of short, diagonal grooves that are evenly dispersed and a row of grooved herringbone at the bottom. This is bordered just below the neck with two rows of comb. The belly zone mirrors the comb rows with three comb horizontal lines, which are followed by a panel of grooved X-shapes and then three horizontal rows of comb. Finally, the base is filled with horizontal rows of comb with one panel of the X-shaped incisions in the

middle. NMS X.EG 105 survives entirely, albeit with a light deposit of manganate on the surface, and it is 21 cm tall. The rim diameter is 140 mm and the base is 75 mm wide.

18. Seton, East Lothian

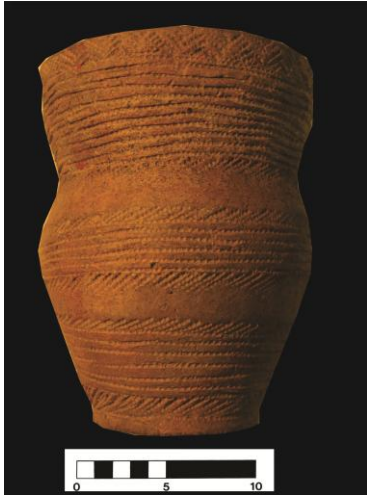


NMS X.EG 50

The Beaker from Seton has a flat-topped rim with a straight neck that bends insightly at the bottom and then out quickly to an angular belly. The walls, which are 9 mm thick, then bend quickly in down to a pedestalled, flat base. Inside, the transition is abrupt to a flat base with a central cone. The fabric has a sandy texture comprising sub-angular dark gray and black lithic inclusions that are 2-3 mm. Sparkly lithic material, probably mica, was also observed. The pot is yellowish red on the outside and inside and the core is black with red edges. It is 13 cm tall, 120 mm wide at the mouth and 90 mm wide at the base. The decoration on this pot has been done using a comb that is 27.5 mm long and has square teeth that are 1 mm wide. This was done in two zones, the neck and belly. On the neck, two horizontal rows with diagonal rows in between overlie a row of short vertical lines and a final row of herringbone. On the belly, herringbone in the opposite direction is at the top of the zone, followed by diamonds and a further row of herringbone. Just about the entire vessel survives, although there are some reconstructed parts, and manganate was noted on some parts of the external surface. Clarke does not mention this vessel in his corpus; however, it would fit within his N2 category, or Lanting & Van der Waals' Step 6.

19. Borthwick, Cakemuir Hill, Midlothian

The two ‘drinking cups’, found in separate cists on Cakemuir Hill, are catalogued in the NMS as NMS X.EG 12 and NMS X.EG 13.



NMS X.EG 12

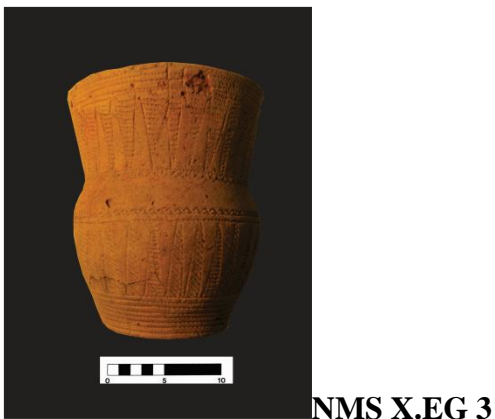
Clarke (1970, 518) places this Beaker into his N3 category and Lanting & Van der Waals' criteria would place this pot as Step 3 or 4. It has a straight rim with a squared top that bends into a concave neck and out to an angular belly with a maximum width of 12.5 cm. The base is flat with a pedestal. The walls of this pot are 7 mm thick and the fabric is smooth. Since it is complete, only subangular gray and red lithic inclusions, 0.5-2 mm wide, could be seen from the surface. The walls of this pot are reddish brown and it is 15.6 cm tall, 134 mm wide at the mouth and 78 mm wide at the base. It is ornamented on its surface using a square-toothed comb in three zones. The rim has a pattern of triangles around its edge, which is followed by several horizontal rows and finished with a row of short, diagonal lines that form a feathered border. The belly zone has more horizontal lines with short, diagonal lines in opposing directions on its borders, and this is repeated for the base zone.

20. Craigentenny, Edinburgh, Midlothian



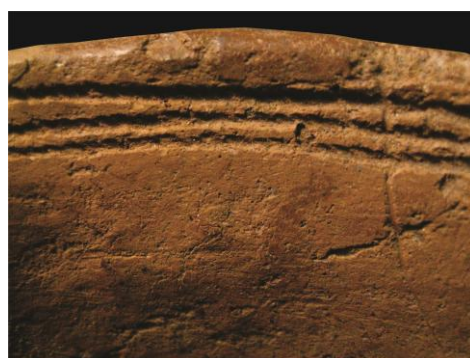
The Beaker from Craigentenny remains as several sherds that comprise about 25 % of the original pot. They are from an N2 vessel (Clarke 1970, 518), but would fit Lanting & Van der Waals' Step 2/3. The neck is fairly straight and the belly rounded. The base is flat with a gradual/abrupt transition in the base. The walls of this pot are thin at 6 mm and the fabric is very gritty consisting of angular, gray lithic inclusions, 1-2 mm wide and sparkly, black lithic material (probably mica) that is 3 mm wide. A heavy slip covers both sides and the walls are yellow/brown on the outside, brown inside and black in the core. The decoration has been done using a square-toothed comb with 1 mm wide teeth. There are horizontal rows under the rim and two cordons below this form a neck cavetto. In this, parallel zigzag rows have been impressed with comb. Horizontal rows of comb then fill the space to the base of the vessel, where they are opposed with a row of vertical rows of comb that encircle the base. Although so little of this pot has survived, a rim diameter was determined to be 90 mm and the base was 80 mm wide.

21. Juniper Green, Edinburgh, Midlothian



The Beaker from Juniper Green is classified by Clarke (1970, 518) as N3 and by Lanting & Van der Waals as Step 5. It has a squared rim top that gives way to an outward-bending rim that comprises half of the vessel. The walls then bend abruptly out to an angular belly, which is 12.5 cm wide, and then narrow to a slightly pedestalled, flat base. Inside, the transition is gradual to a flat base. The walls of NMS X.EG 3 are 8 mm thick and the fabric is coarse with many crushed, gray lithic inclusions that are 1.5-2.5 mm wide. Three deep seed impressions (the pits visible in the photo) were observed on the external wall and one was found in the internal wall. The pot may have been slipped, but traces of this are now gone and the pot is reddish/brown on the outside and yellow/pink on the inside. NMS X.EG 3 is 16.5 cm tall, 142 mm wide at the mouth and 93 mm wide at the base. The decoration on this pot has been done using a square-toothed comb with 2 mm wide teeth. There are two zones of decoration: on the neck and on the lower body to the base. The neck has several horizontal lines directly under the rim, followed by a panel of inverted triangles that are filled with horizontal lines, another horizontal row and a row of short, diagonal lines. The lower body begins with two rows of zigzag, then two horizontal lines, and then a pattern of upright triangles that are filled with horizontal lines. The pattern is then finished with horizontal lines to the base. Just about all of this pot survives, although it is pitted and eroded in some places. There is a light deposit of calcium on the outside and a darkened patch near the base inside, but it is otherwise fairly homogenous in colour.

22. Bathgate, Edinburgh, Midlothian



NMS X.EG 47

NMS X.EG 47 is one of two Beakers found at Bathgate, although only this one was examined for this project. It is a thin-walled, finely-made vessel that is part of Clarke's (1970) AOC series and fits into Lanting & Van der Waals' Step 1. The rim is simple and bends out slightly with a long, concave neck and low, angular belly that is 13 cm wide, a rounded lower belly and concave base. Inside, the transition is abrupt to a convex bottom. The walls of this vessel

are 6 mm thick and the fabric is sandy with a red and dark gray, rounded and natural lithic inclusions at are 1-4 mm wide. The walls are hard and thin and are slipped on both sides – they are brick red and the core is dark gray. This vessel is 14.6 cm tall, 140 mm wide at the rim and 78 mm wide at the base. It is ornamented on the exterior surface with horizontal rows of very finely-twisted cord (0.5 mm wide strand) and there are three horizontal rows of this inside the rim. About 99 % of this pot remains, as there are some eroded parts, but it is in very good preservation.

23. Cairnpapple, Torphichen, West Lothian



NMS X.EP172

One of three Beakers found at Cairnpapple, NMS X.EP 172 has a bevelled rim that flares outwards very slightly and a straight neck. The belly is rounded and lower down the vessel, reaching a maximum width of 12 cm, and the base is flat and pedestalled. The entire construction of this pot is less professional than others in the region, and it has an abrupt transition inside with a slightly raised base. The walls are 8 mm thick, but the fabric is difficult to examine since a slip covers most of it and the rest of the pot has been reconstructed. Lithic inclusions, 1-2 mm, were noted and sand as well, but it is not possible to report more. The surfaces of this pot are orange/red and it appears to have been wiped after decoration as some of the motifs are smudged. These comprise three zones filled with patterns and from the impressions of a rectangular-toothed comb with 2.5 mm wide teeth. The first zone has parallel, converging diagonal lines that form triangles directly under the rim, followed by four horizontal lines, a wide zigzag pattern composed of parallel, diagonal lines, three more horizontal lines and a single zigzag. The belly zone repeats the zigzag, two horizontal lines and wide zigzag made by parallel, diagonal lines, and is bordered at the bottom by three more horizontal lines and a zigzag. The base zone has only two zigzags that oppose each other to form a diamond pattern, divided by a horizontal line. The rim diameter is

123 mm x 116 mm and the base is 80 mm wide. The vessel is 17.4 cm tall. Clarke (1970, 522) places this pot into his N/NR category and, based on its overall shape and zonal decoration, it fits Lanting & Van der Waals' Step 3. About 95 % of this pot remains and it is reconstructed. A white-coloured residue was noticed on one side of the pot inside.



NMS X.EP 173

The second Beaker from Cairnpapple is catalogued by Clarke (1970, 522) as N2 and by Lanting & Van der Waals as Step 5. It has a simple, flat topped rim and curved neck with a gentle contour to the neck an angular belly that reaches 12.4 cm wide. The base is concave and has a pedestal and on the inside, the transition is abrupt to a flat base with a central cone. The walls are 8 mm thick and the fabric is very gritty with dark gray crushed lithic inclusions, 1-3 mm wide. A heavy slip covers this and it is brown on both surfaces and dark gray in the core. It is 16.8 cm tall, 140 mm x 130 mm in diameter at the rim and 90 mm wide at the base. The decoration was done using a square-toothed comb with 1.5 mm wide teeth in three zones. On the neck, a row of short, diagonal lines is followed by two horizontal lines and then a panel of converging diagonal lines that form a diamond pattern. The diamonds are infilled with vertical lines. Horizontal lines then divided three further panels of herringbone, rows of lozenge shapes. The belly has a panel of vertically-placed zigzags with a double, horizontal row at the upper and lower borders. The base zone has only two horizontal lines followed by herringbone. About 60 % of this pot is original and the rest has been reconstructed; however, a light deposit of manganate was noticed on one side.



NMS X.EP 174

This thick pot, with thick walls (10 mm) has a squared flaring rim that makes up more than half of the vessel. The lower portion of the pot is globular with a rounded belly that reaches a maximum at 13 cm wide, and the base is pedestalled and flat. Inside, the transition is obscured by material from the reconstruction. Scraping was observed inside the rim of this pot (photo 2) and of particular interest are the impressions of plant remains that have been captured in the base, particularly a clear image of a leaf (photo 3). The fabric of this pot is fairly gritty with crushed, dark gray lithic inclusions, 3-4 mm wide, and white lithic flecks having been added to the clay and a heavy slip has been fired to a light brown on the outside, gray inside and the core is dark gray. This pot is 17 cm tall, 150 mm in diameter at the rim and 80 mm wide at the base. NMS X.EP 174 has been decorated over its exterior, using horizontal lines that have been grooved and rows of birdbone impressions in three zones. About 70 % of this pot has survived, as there are several sherds missing and a few eroded places, and it has been reconstructed. The Cairnpapple Beaker, NMS X.EP 174, is recorded by Clarke (1970, 522) as N2 and it fits Lanting & Van der Waal's Step 6 category with its globular, low belly and cylindrical neck and contracted decoration in only two zones.

24. Tartraven, Linlithgow, West Lothian



NMS X.EG 32

This Beaker has a rounded rim top and a flaring neck that makes way to a high, angular belly. The walls then narrow in a vase-shaped profile to a slightly concave base. Inside, the transition is gradual and the base is flat with a central cone. The walls of this vessel are 7.5 mm thick and the fabric is very gritty with crushed black and dark gray lithic inclusions, 0.5 – 2 mm wide, and some quartzite pieces added as opening agents. The surfaces are smoothed and wiped and the outside is brown with a red hue and the inside is pinkish/yellow. A texture on the base of this vessel has the impressions of straw or grass and seeds, suggesting that it was set upright to dry on these materials. It is 13.5 cm tall, 113 mm wide at the mouth and 73 mm wide at the base. The decoration on this pot is spartan and uses only a round-toothed comb. There are two rows of opposing diagonal lines on the neck, bordered at the bottom by a horizontal line, and then a row of widely-spaced herringbone around the belly. About 95 % of this pot has survived and there are sherds missing, particularly at the rim. Clarke (1970, 522) lists it as N2 and it would fit Lanting & Van der Waal's Step 4 category for vessel shape, although the decoration on this pot is sparser than any of their examples for any of the steps.

25. Mossplat, Carluke, Lanarkshire



NMS X.EG 25

The Beaker from Mossplat has a very wide, open rim that is flattened, but simple, and takes up more than half of the vessel. The lower portion of this pot is then a very globular, very rounded belly, reaching about 10 cm wide, that leads to a flat, pedestalled base. Inside, the transition to the base is abrupt to a flat base. The walls of this pot are 8 mm thick and the fabric was prepared by adding angular, light gray lithic inclusions, 2-3 mm wide, that were crushed. A slip was put over this to cover them and the surface is reddish brown on the outside, dark gray and sooty on the inside, and light brown in the core. NMS X.EG 25 is 18 cm tall, 150 mm wide at the rim and 75 mm wide at the base. The decoration on this pot was done entirely with square-toothed comb with two sizes of teeth – 1 mm and 2mm – in three zones. On the neck is a panel of cross-hatching, followed by four rows of short, vertical lines that are interspersed with rows of x-shaped impressions. The belly zone has a panel of converging diagonal lines that form a diamond pattern that is bordered at the top and bottom by horizontal lines and a row of short, vertical lines. And the base zone repeats this. The entire pot from Mossplat survives, although the slip is worn in some places, and there are blackened patches from smoke clouds in the fire. Clarke (1970, 519) classifies this pot as N3 and it fits best into Lanting & Van der Waal's Step 6, based on shape and decoration.

26. Wester Yardhouses, Carnwath, Lanarkshire



NMS X.EQ 165

This vessel remains as a rim sherd from a vessel with a cylindrical neck and insloping rim. At the bottom of the sherd, the walls, which are 8 mm thick, begin to bend out to a high belly (although it is likely that this neck takes up at least half of the vessel height if it follows others of its kind). The fabric is extremely gritty and composed of crushed gray and brown lithic material that is 1-2 mm wide. White lithic of the same size was also noted, but it was not prepared by crushing. The pot was well-slipped on both sides and it is reddish/brown on the surfaces and black and sooty in the core. The diameter of the rim is 180 mm wide. The decoration on this pot was done using two different combs as tools. The first was a rectangular-toothed comb with 2 mm wide teeth, and the second was a square-toothed comb with 1.5 mm wide teeth. Inside the rim, there is a diamond pattern that has been made with the rectangular-toothed comb. Then on the neck are alternating panels of zigzags and short, vertical lines, each divided by three rows of horizontal comb. These were done with the rectangular-toothed comb, except for the rows of short, vertical lines, which were impressed with the square-toothed comb. At the bottom of the sherd, on the shoulder, the pattern changes with a panel of X-shaped impressions in rectangular-toothed comb. This sherd probably only represents about 15-20 % of the original vessel, but Clarke (1970, 519) was able to place it into his N2 category and with its cylindrical neck and full neck zone of panelled decoration, it would easily fit Lanting & Van der Waals' Step 6.

27. Drowsy Brae, Shieldhill, Lanarkshire



NMS X.EG 92

Without much in the way of provenance, this Beaker is simply listed as having been found during roadworks at the turn to the 20th century. It is a heavy vessel with a squared rim and straight neck that makes up more than half of the vessel. The belly then suddenly bends outward at an abrupt angle to a maximum width of 12.7 cm, and then quickly bends in and down to a very pedestalled, flat base. Inside, the transition is abrupt to a flat base with a very slight central cone. There is scraping on the walls under the rim inside as well – probably to thin the walls (which are 9 mm thick) of such a heavy pot. Clarke (1970, 519) describes this vessel as S3 and its characteristics place it comfortably into Lanting & Van der Waals' Step 5/6 on account of its cylindrical neck, low, angular belly and two broad bands of decoration. The fabric of NMS X.EG 92 is gritty with dark gray, rounded and subangular lithic pieces, 1-3 mm wide, mixed into the clay; most of these appear to be natural, but some look crushed. A slip was placed on both sides, particularly heavy on the exterior and this was fired to a reddish/brown colour on all surfaces. NMS X.EG 92 is 16.8 cm tall, 136 mm in diameter at the rim and 84 mm in diameter at the base. The decoration on this vessel has been done entirely with the use of grooving. There are zigzag motifs on the rim top, and then two panels on the exterior: the neck and the lower body. The neck has panels of x-shapes, multiple zigzags, a row of short, vertical lines, cross-hatching and short diagonal lines, each separated by a horizontal row. The lower body then has a row of cross-hatching, followed by a large panel of multiple zigzags, divided by single, horizontal lines. Just about all of this pot has survived, despite its dangerous discovery (for the pot); blackening was noted inside the pot near the base and a light deposit of manganate was noted.

30. Newbiggingmill Quarry, Lanarkshire



This well-made little Beaker has a flattened, inward-sloping rim that gives way to a slightly flaring neck. The belly, which expands quickly to 10.5 cm wide, is angular and the walls then quickly narrow to a concave base. The transition inside is abrupt to a flat base with a central cone. The walls of this vessel are 7.5 mm thick and are remarkably even throughout the pot. The fabric is gritty with small, dark gray and black, angular lithic inclusions (2-3 mm wide) and the pot is slipped on both sides. This has been fired to a red colour on the outside, but the inside and core are brown. NMS X.EQ 858 is only 11 cm tall and it has a rim diameter of 112 mm and a base diameter of 67 mm. It was decorated using a rectangular-toothed comb in two panels. The rim top has crosshatching impressed on it (photo 2) and under the rim on the outside are horizontal lines bordering the top and bottom of a neck panel that has parallel, converging, diagonal lines that form a zigzag pattern. The second zone on the lower belly to the base repeats this. NMS X.EQ 858 survives in its entirety, but there are places where the slip has worn away and where there are patches of manganate.

31. Crawford (Crawfurd), Lanarkshire



NMS X.EQ 138

This vessel is a stout pot that has a simple rim and flaring neck that narrows at the bottom before angling out to an angular belly that is 12.5 cm wide. Below this, the walls, which are 9 mm thick, bend in quickly to a wide, flat base. The transition inside is gradual to a flat base with a central cone. NMS X.EQ 138 was made from gritty clay that had been prepared using many angular, black lithic inclusions, 1-3 mm wide, and a heavy slip on both sides. It is dark reddish/brown on both sides with a dark gray core. The decoration on this pot was done using a squire-toothed comb with 1.5 mm wide teeth. Inside the rim is herringbone and on the outside from the rim to the base of the neck are parallel horizontal lines. Below this is a pattern of inverted triangles, infilled with horizontal lines, followed by a panel of herringbone that is bordered at the top and bottom by horizontal lines, and then a further panel of vertical triangles that are infilled with horizontal lines. The shape and decoration place this pot into Lanting & Van der Waals' Step 4. Clarke does not list this Beaker in his corpus, but it would fit into his northern series.

35. Lanarkmoor, Lanarkshire



NMS X.EG 18

The vessel, NMS X.EG 18 and NMS.X EG 19 are both Beakers that were found on Lanarkmoor and now rest in the NMS. NMS X.EG 18 is catalogued by Clarke (1970, 519) as N1/D and NMS X.EG 19 as N3, whilst they would fit into Lanting & Van der Waals' Steps 3-4 and 6, respectively. NMS X.EG 18 has a slightly squared-off rim that flares out from a thin neck and a rounded belly that reaches 11.5 cm in width. The walls, which are 8.5 mm wide, then narrow to a pedestalled, flat base. Inside, the transition to the base is abrupt to a flat base with a small central cone. Scraping is evident on the inner walls in the form of striations that demonstrate a diagonal trajectory from the rim and then a horizontal motion at the neck below. The rim is uneven along its top. The fabric of this pot is gritty with just over half of the make-up consisting of very angular, dark gray and black lithic material that is about 1 mm wide. In a few places the surface has been buffed to a shine (presumably this was the case with the entire pot originally) and it is a red colour on the surfaces and black in the core. EG 18 is 16.5 cm tall, 125 mm in diameter at the rim and 75 mm wide at the base. It has been decorated with a square-toothed comb with 0.5 – 1 mm wide teeth in three zones. The first is on the neck and has a row of short, diagonal lines, two rows of cross-hatching and another row of short, diagonal lines, each separated by four horizontal lines. The belly zone has a panel of several horizontal lines bordered by short, diagonal lines at the top and bottom, and the base zone has short, diagonal lines in the opposite direction, followed by horizontal lines and then a panel of triangles that are infilled with horizontal lines. About 85 % of the vessel is original and the rest has been reconstructed



NMS X.EG 19

The second Beaker, NMS X.EG 19, has a very squared-off rim that gives way to a straight collar and a concave neck. The belly is high and angular and reaches a maximum width of 12.5 cm, and then the walls, which are 8 mm thick, narrow gradually to a wide, flat base. Inside, the transition is abrupt to a convex base with a prominent central cone. Striations from

wiping or scraping are present under the rim on the inside. The fabric of NMS X.EG 19 is very gritty consisting of very angular, dark gray lithic inclusions that range from 2-3 mm wide and smaller. This pot was slipped and buffed to a shine on its surfaces and it is brick red on the outside, light brown inside and dark gray in the core. It is 17.5 cm tall, 130 mm wide at the rim and 90 mm in diameter at the base. The decoration on this vessel is complex and has been done using a square-toothed comb with 1 mm wide teeth in four zones. The neck zone is divided into vertical panels that are further subdivided into vertical or horizontal panels. These are then filled with patterns of herringbone, cross-hatching, vertical lines and horizontal lines. The zone is bordered at the bottom by a horizontal line and a row of short, diagonal lines. The belly zone has a border at the top and bottom of crosshatching followed by three horizontal lines and inside this are vertical panels of alternating patterns of 'feathered' boxes, vertically-aligned zigzag, or vertical lines. The lower body zone has a row of X-shapes, followed by two horizontal lines, three parallel rows of zigzag, and a horizontal line. And the base zone is divided into vertical panels of vertical lines, horizontal lines, diagonal lines and vertical herringbone. Just about all of NMS X.EG 19 has survived, but there is a light deposit of manganate on its surface. A darkened patch was also noticed inside near the base.

37. Oliver, Tweedsmuir, Peeblesshire



NMS X.EG 55

This vessel is very open-mouthed pot with a squared rim and flaring neck that takes up half the vessel's height. The belly is angular, stretching to 12 cm in width rather quickly, and then the walls, which are thick at 10.1 mm, bend in to a pedestalled, flat base. The pot is slightly asymmetrical and it sits on a slant. The transition inside is abrupt and the base is flat with a

central cone. A seed impression was noticed on the base. The fabric of NMS X.EG 55 is very gritty with dark gray, angular lithic pieces, 1-3 mm wide, and rounded, gray lithics that are up to 5 mm wide. A slip was put on both sides, although it does not fully cover the inclusions, and it was fired to a light brown colour on the surfaces and dark gray in the core. NMS X.EG 55 is 18 cm tall, 145 mm wide at the rim and 80 mm wide at the base. It is decorated entirely in rectangular-toothed comb with 1.5 mm wide teeth, in two zones. The rim top has zigzag encircling the pot and on the neck zone are panels of short, vertical lines, X-shaped impressions, inverted triangles made from three parallel, diagonal lines, and upright triangles of the same composition, all divided by several horizontal rows. The lower body zone repeats the triangular pattern, where the opposing triangles point to one another, forming diamonds in the voids in between, and horizontal rows border this on the top and bottom. A final row of inverted triangles, infilled with vertical lines, ornaments near the base. About 95 % of this pot remains as it is missing a large rim sherd. Clarke (1970, 520) places NMS X.EG 55 into his N3 category and Lanting & Van der Waals' Step 6 would best suit this pot because of its angular body shape and two broad panels of decoration (particularly the use of infilled triangles as a motif).

38. Drumelzier, Peeblesshire



NMS X.EQ 394

This Beaker is held in the NMS under the registration of NMS X.EQ 394 and it is categorised by Clarke (1970, 520) as an AOC vessel and by Lanting & Van der Waals as Step 1-2. It is a small vessel and has a flaring, flat-topped rim with straight walls (5 mm thick) and a low, angular belly. The base is slightly concave and the transition inside is abrupt to a slightly convex base. The fabric of NMS X.EQ 394 is smooth with evenly-spaced crushed lithic

inclusions that are small, but a few large pieces (up to 8 mm) were observed. Grog was also recognised. The surfaces are reddish/brown and the core is black. This little vessel was 11.5 cm tall, 85 mm in diameter at the rim and 59 mm wide at the base. It is decorated in horizontal rows of twisted cord (1 mm strand) from rim to base and smearing of this decoration suggests it was wiped after the lines were impressed. About 99 % of this pot remains and just a little manganate was noticed on the surface.

41. Lanton Mains, Jedburgh, Roxburghshire

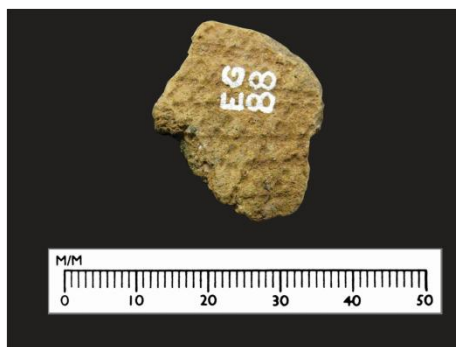


NMS X.EQ 604

The vessel NMS X.EQ 604 from Lanton Mains (listed as Lanton Tower by Clarke) is a well-made, but heavy Beaker with a squared-rim top, a straightish neck and an angular belly, 14 cm wide, that juts out suddenly from the wall. The walls, which are 7.5 mm thick, then narrow quickly toward a pedestalled, flat base that has a gradual/abrupt transition inside to a

flat base with a central cone. The fabric of this pot has crushed dark gray and black lithic inclusions that are 1-2 mm and smaller. A heavy slip was placed over this and the pot is brick red on the outside, dark gray/black on the inside and brown in the core. It is scraped on the upper 2/3 of the vessel inside and striations are particularly clear (photo 2). NMS X.EQ 604 is 17 cm tall, 150 mm wide at the mouth and 75 mm in diameter at the base. The decoration was impressed on this vessel using a very fine-toothed, square-toothed comb with very small spaces between the teeth (about 0.1 mm) (photo 3). Four narrow zones are on the upper neck, lower neck, belly and base. On the upper neck is a row of short, vertical lines and a row of cross-hatching that is divided by horizontal lines and this is repeated once. On the lower neck is a panel of short, diagonal lines, followed by cross-hatching and bordered by horizontal lines (photo 3). The belly zone is ornamented by two rows of short, vertical lines on either side of a panel of herringbone that is bordered by horizontal lines and on the base this is repeated. Just about all of this vessel has survived, but there are a few rim sherds missing. The slip is eroded near the base on the inside and manganese was noted on the surfaces. Clarke (1970, 521) places this vessel into his N2 category and its low, angular belly, cylindrical neck and more simple decoration in narrower zones would give it a place in Lanting & Van der Waals' Step 5.

42. Bedrule, Roxburghshire

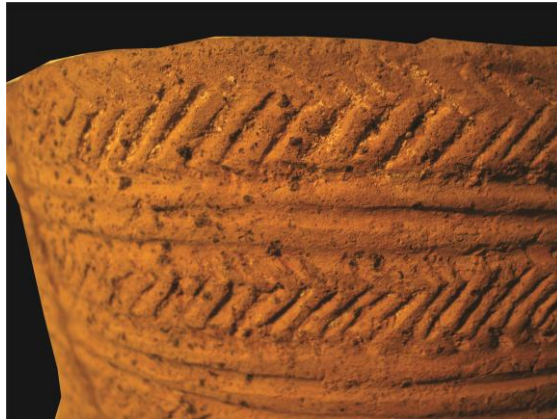
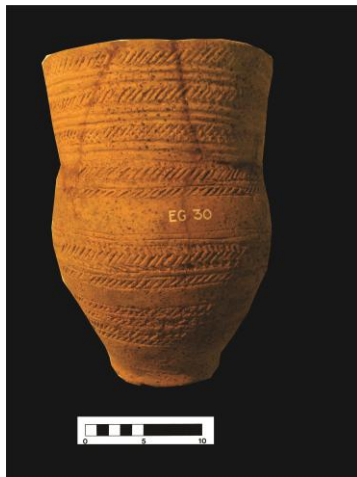


NMS X.EG 88

The small body sherd from Bedrule, registered in the NMS as NMS X.EG 88, is an eroded piece from a vessel with thin walls (6 mm) and a sandy fabric. These are rounded, natural white lithics, 1-2 mm wide; prepared, angular, gray lithic pieces, 1-2 mm wide, and grog. If there is a slip, it is very light and the surfaces are yellowish/brown with a red core. The decoration on this sherd was done with a rectangular-toothed comb with 1.5 mm wide teeth. A pattern of cross-hatching ornaments its surface with horizontal rows divided by evenly-

spaced diagonal rows. This sherd represents less than 1 % of the original vessel and so no measurements could be determined, but a deposit of red material was noted on the inside of the sherd. Clarke (1970, 521) lists this pot in his corpus, but has catalogued it as an indeterminate type.

43. Wester Wooden, Eckford, Roxburghshire



NMS X.EG 30

The vessel from Wester Wooden is currently held in the NMS and catalogued as NMS X.EG 30. It has a very squared rim top with a slightly flaring neck. The belly is mid-low set and rounded and then the walls, which are 8.5 mm thick, narrow quickly to a very pedestalled, slightly concave base. Inside, the transition is gradual/abrupt to a flat base and there are striations visible where the transition has been scraped to make it more abrupt. Scraping was also noted on the walls above this to thin them. The walls of NMS X.EG 30 are reddish/brown with a pink hue on the exterior and the inside of the pot is brown; the core was not visible. This pot is 15 cm tall and it has an oval rim that is 162 mm x 140 mm in diameter. The base is 84 mm wide. The decoration on this pot was done by grooving and was put in three zones. The neck has panels of herringbone, crosshatching and diagonal lines, each separated by a horizontal line. Of note is the uppermost panel that has herringbone on one half and diagonal lines on the other (photo 2). The belly zone has two panels of herringbone and short, diagonal lines, divided by horizontal lines and the base has four panels of short, diagonal lines separated by single horizontal lines. The entire pot has survived, although it was reconstructed from sherds and a light manganate deposit was noted on the external surface. Clarke (1970, 521) places this vessel into his N3 category and it fits into Lanting & Van der Waals' Step 3.

44. Easter Wooden, Eckford, Roxburghshire



NMS X.EG

38

This vessel is registered as NMS X.EG 38 in the NMS and is listed by Clarke (1970, 521) as N3 and by Lanting & Van der Waals as Step 6. It has a flattened rim top with a flaring, inward bending neck and a very globular, rounded belly. The base is very pedestalled and flat and has an abrupt transition to an uneven base with a large, central cone inside. The walls of this vessel are 9 mm thick and the fabric is only slightly gritty comprising grog, sand, very angular lithic inclusions that are 2-3 mm wide, and rounded, natural dark gray and white lithic pieces. A slip was placed over these and the pot was fired to a brick red on the outside (with a yellow tinge to the slip), brick red inside and a black core. NMS X.EG 38 is 21 cm tall, 130 mm in diameter at the rim and 90 mm in diameter at the base. The decoration of this pot is complex and has been done entirely with a square-toothed comb that was 2.5 cm long and had 1.5 mm wide teeth. It is entirely decorated from rim to base with horizontal lines dividing panels of: cross-hatching, inverted triangles infilled with zigzag, more cross-hatching, upright triangles infilled with zigzag, another cross-hatching panel, smaller triangles infilled with zigzag rows, herringbone and then herringbone in the opposite direction. As a rare treat, the base has been grooved with a wide zigzag pattern. NMS XEG 38 remains only about 65 % complete, although it has been reconstructed and the huge belly sherd thus replaced.

45. Knock Hills, Edgerston, Roxburghshire

The sherds from Knock Hills, from vessel NMS X.EQ 393, are a rim and four body sherds from a vessel with a simple rim and vertical neck. The walls are 7.5 mm thick and the fabric is sandy with some prepared, gray lithics included that are up to 2 mm, but mostly smaller. A slip on both sides is pink on the outside, dark gray inside and the core is black. The ornament on this pot was done using a rectangular-toothed comb with 2 mm wide teeth. On the neck there is a panel of herringbone and two zones of panels of crosshatching with horizontal rows, is on the body. These sherds, which are now held in the NMS, represent less than 5 % of the original vessel and they are badly eroded. Clarke (1970, 521) suggested an N2 category for them, but the vessel really is too fragmentary to know for sure.

46. Littleton Castle, Kelso, Roxburghshire



NMS X.EG 23

The Beaker from Littleton is a symmetrical vessel with smooth curves and a true S-shaped profile. The rim is missing, but the neck is flaring and underneath, it bends out to a wide, angular belly that is 12.5 cm. The walls, which are very thin (6.5 mm) then bend in to a flat base. The transition inside is abrupt and the base is flat there also. This vessel is extremely well-made and the fabric is smooth with about half of its composition consisting of angular, dark gray, prepared lithics, 1-2 mm wide, and a few rounded gray pebbles that were most likely naturally in the clay. A heavy slip has been put on the outside and a lighter one inside and the pot is red on both sides with a black core. NMS X.EG 23 was decorated using a rectangular-tooth comb with 2.5 mm wide teeth in three zones of herringbone: on the neck, shoulder and lower belly. About 90 % of this vessel remains as the rim is missing and so a height determination could not be taken – it is 17 cm tall without the rim. The diameter at the

highest part of the vessel is 110 mm, so the rim diameter would have been slightly more than that and the base diameter is 80 mm.

47. Springwood, Kelso, Roxburghshire



NMS X.EQ 777

The vessel from Springwood has a simple, out-flaring rim with a flaring neck, gentle, high shoulder and elongated body. The base is flat both inside and out and the transition is abrupt. The fabric of NMS X.EQ 777 is clay-rich with crushed lithic inclusions. These are gray and measure 1-2 mm in width. White flecks of lithic material were also noted. The vessel was wiped, but much of this is obscured by the reconstruction material. The decoration on this pot was done using a square-toothed comb with 1 mm wide teeth in four panels. On the neck are horizontal rows, only broken by a panel of herringbone, whilst the second comprises only three horizontal rows. The third zone, at the shoulder, has four horizontal lines, followed by a row of short, diagonal lines, and the final zone, at the base, has a border of short, diagonal lines, two horizontal lines, a panel of herringbone, three horizontal lines and a panel of cross-hatching. Clarke does not list NMS X.EQ 777, but based on its decoration it would fit into N1/D. Lanting & Van der Waals place this vessel into their Step 4 category. This pot is 21 cm tall. It has a rim diameter of 155 mm and the base diameter is 86 mm. It is reddish/dark brown on the surfaces and red in the core. Only about 30 % of NMS X.EQ 777 survives and the rest has been reconstructed, but a deposit of calcium could be discerned on the surface.

48. Lauder Hill House, Berwickshire



NMS X.EG 83

This body sherd is 8 mm thick and has a fabric comprised of rounded white stone, 1-2 mm wide, and crushed, gray pieces, 1-2 mm wide. It is slipped on both sides and the exterior is reddish brown, the interior is black and the core is also black. The surface is decorated with horizontal lines and a panel of cross-hatching, probably of comb, although no teeth could be identified. It represents less than 1 % of the pot and it is heavily eroded.

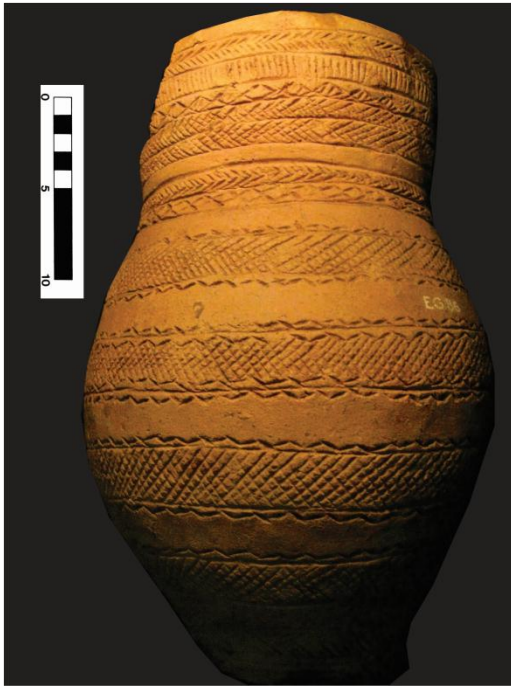
49. Cadger's Cairn, Gordon Moss, Berwickshire



NMS X.EG 82

The sherd from Gordon Moss is a wall sherd from an AOC Beaker. It is 7 mm thick and has a gritty fabric with dark gray, crushed lithic inclusions that are 1-2 mm and gravel and sand added to it. The external surface is reddish brown and the inside is yellowish brown, whilst the core is dark gray. This sherd represents less than 1 % of the original pot and it is heavily eroded.

50. Mack's Mill, Gordon, Berwickshire



NMS X.EG 86

NMS X.EG 86 is an almost-complete Beaker that Clarke (1970, 515) lists as an N3 vessel and fits into Lanting & Van der Waals Step 3. It is a large vessel with a simple, flattened rim that turns in slightly at the top, a rounded neck that narrows at the bottom and a very rounded belly that stretches to a maximum width of 16 cm. The walls, which are thick at 10 mm, then narrow dramatically to a slightly concave base. The transition inside is abrupt to a flat base. The fabric of this vessel is slightly sandy with dark gray, crushed lithics that are 2-3 mm wide (although some reach 7 mm across) and sand. The walls are hard and the surface sandy to touch. NMS X.EG 86 is yellowish/brown with a red hue on both sides and the core is dark gray/black. It is 25 cm tall, 130 mm in diameter at the rim and 76 mm in diameter at the base. The decoration on this pot has been done entirely by incision with thin stick and an oval birdbone (or other such utensil), and is in five panels. On the neck, there are panels of herringbone, short, vertical lines, diamonds infilled with vertical lines, crosshatching, herringbone in the opposite direction and empty diamonds, each separated by a single horizontal line. Across the belly are three more zones that are identical; they have zigzag borders on the top and bottom with crosshatching and horizontal lines in between. The base zone repeats this, but instead of a bottom border of zigzag, it has two rows of crosshatching and then horizontal lines to the base. Important to note is that the vessel was wiped again after decoration (seen by the smudging of some of the motifs) and the upper half inside was scraped to thin the walls. About 85 % of the original vessel has survived as a large rim and belly sherd is missing and a very light manganate deposit was noticed on the surface.

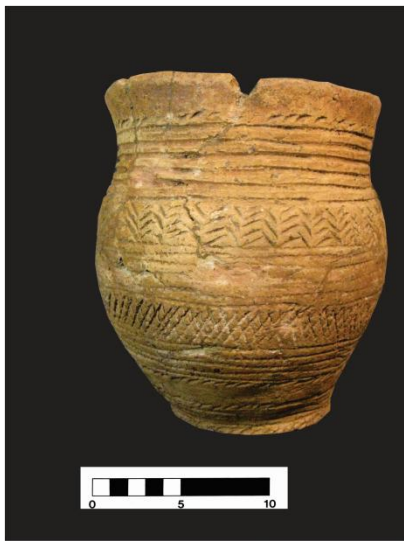
51. Hoprig, Cockburnspath, Berwickshire



NMS X.EQ 599

In addition to the Collared Urn and Enlarged Food Vessel found at Hoprig (each described in its own section), two Beakers were also uncovered. These are housed in the NMS as NMS X.EQ 599 and NMS X.EQ 600. The first is a complete vessel, described by Clarke (1970, 515) as N2 and by Lanting & Van der Waals as Step 4. It is a well-formed pot with a simple rim and bends slightly in at the very top but is flaring at the neck. The belly is rounded and well-set and reaches a maximum width of 13 cm, and then the walls, which are 7.5 mm thick, narrow to pedestalled, slightly concave base. Inside, the transition is gradual/abrupt and the base is flattened with a central cone. The fabric of NMS X.EQ 599 is somewhat gritty with crushed, dark gray lithics, 0.5 – 1 mm wide, that are sparsely distributed. Some of these protrude from the surface. This vessel is brick red on the outside and yellowish red inside. It has a dark gray core and a texture, as if it had been dried on a bed of straw or grass, could be seen on the base (photo 2) – several strands of straw could be clearly discerned. The decoration on this pot is finely-done by grooving and the impressions of a comb with 1.5 mm teeth (only two teeth could be determined in any of the impressions, although the comb will probably have been longer). These tools were used to create four zones of decoration at the rim, lower neck, lower body and base. On the rim is a row of short, diagonal lines directly under the rim and then horizontal grooves to the neck, finished by a row of short, horizontal impressions of comb (each only two teeth long). This row is repeated in the lower neck zone, followed by four horizontal grooves and a zigzag of the same short, comb impressions. The lower body zone repeats the last zigzag row and then there are panels of horizontal rows of comb, followed by horizontal rows of maggot impressions; this is repeated on the base zone.

NMS X.EQ 599 is 18 cm tall and 130 mm wide at the rim. The base is 90 mm wide and it has a reddish deposit on the inside.



NMS X.EQ

600

The second Beaker from Hoprig is a squat and asymmetrical vessel with a simple, flaring rim, concave neck and high, rounded belly. It has a pedestalled, slightly concave base with a gradual transition to a flat base inside. The pot is fairly crude in construction and, in some places, appears to have been made when the clay was too dry (as seen by hairline fractures and cracks). The walls of this pot are also fairly thick at 8-9 mm and the clay is atypical for Beakers as it is clay-rich with rounded, natural lithics and sand making up the greatest portion of the incusions and a few crushed lithic pieces 1-2 mm wide having been added. NMS X.EQ 600 was slipped and it is reddish/yellow on the outside, brick red inside and black in the core. It is 14 cm tall, 114 mm wide at the rim and 75 mm wide at the base. The decoration on this pot was done on two broad zones: from rim to lower body and around the base. The upper zone comprises panels of halfmoon shapes made by a square-toothed comb with 1.5 mm wide teeth, zigzag, diagonal lines opposing to create a lattice of diamonds, each separated by horizontal lines of comb. The base zone is simpler with two rows of the halfmoon shapes separated by five horizontal rows. In some places, white matter can be seen in the impressions of the decoration (photo 2). About 99 % of this pot has survived the ages and Clarke (1970, 515) places it in the N/MR category. Lanting & Van der Waals place it in Step 4 as well.

58. Gryndan, Norham, Northumberland



EG 34

The Beaker found at Gryndan is an N/MR vessel, according to Clarke (1970, 492) and best fits Lanting & Van der Waals' Step 3. It has a simple, almost pointed rim that is straight and narrows only slightly at the neck. The belly is low and rounded and then the walls, which are 8 mm thick, narrow to a very pedestalled, flaring, slightly concave base. The base is flat inside as well, with a central cone and the transition is abrupt. The fabric of EG 34 is fairly gritty with crushed, dark gray lithic inclusions, 1-2 mm wide, but some up to 4-6 mm, that have been added, along with grog. Striations from wiping were observed inside the vessel and the surface outside is smooth. The surfaces of EG 34 are pinkish/brown and the core is dark gray. It is 13.5 cm tall, 108 mm wide at the mouth and 75 mm wide at the base. The decoration on this vessel consists of three zones of incised herringbone at the rim, belly and near the base. About 95 % of this vessel remains as a rim sherd is missing, and manganate and calcium were both noted to be on the surfaces.

59. Scremerston, Northumberland



The Beaker from Scremerston is categorised by Clarke (1970, 492) as N/NR and fits into Lanting & Van der Waals' Step 5. It is a small, finely-made vessel with a flaring rim, rounded body that extends to a maximum width of 11 cm, and then flat base. Inside, the transition is abrupt to a flat base. The walls are thin at 7 mm and the fabric is smooth with a sandy texture, interspersed with lithic inclusions. These comprise black, angular lithics, 1-2 mm wide. This pot is reddish brown on the outside, dark brown inside and the core is dark gray. It is 13.3 cm tall, 108 mm in diameter at the rim and 67 mm in diameter at the base and the upper ½ is scraped on the inside to thin the walls. This vessel is ornately and expertly decorated from rim to base with a very fine, square-toothed comb that has teeth only 0.7 mm wide. There is cross-hatching under the rim, followed by horizontal rows, which is repeated once more to the shoulder. Below this are zigzags that create a false relief of zigzag, five horizontal lines, and then herringbone, followed by more horizontal lines (photo 2). Finally, the lower 1/3 of the pot has five parallel lines, creating a zigzag pattern that is 'feathered' on both sides with oval shaped maggot impressions (photo 3). Just about all of this pot survives, but there is a heavy deposit of manganate on one side of it on the outside.

61. Ford, Northumberland

The remains of vessel 1879, 1209.1379 is a body sherd from a Beaker that was found in burial 3 in Barrow 184. It has very gently bending curves from neck to belly and walls that are 7.5 mm thick. The fabric is extremely gritty with crushed, dark gray lithic inclusions that are less than 1 mm up to 2 mm and the possible remains of grog were noticed. A slip was put on the outside of this vessel and it is brick red on the outside, brown on the inside and dark gray in the core. The decoration was done using impressions from a hollow, circular tool (perhaps birdbone or a reed), creating a doughnut shape. This motif is the same as the one on the Collared Urn, EA 186, from Berwickshire, although here it is placed in double rows in a lattice pattern. The sherd from Greenwell's collection amounts to about 40 % of the original pot, and Clarke categorises it as S4.

62. Cheviot Quarry, Northumberland



F310, Beaker sherds P6

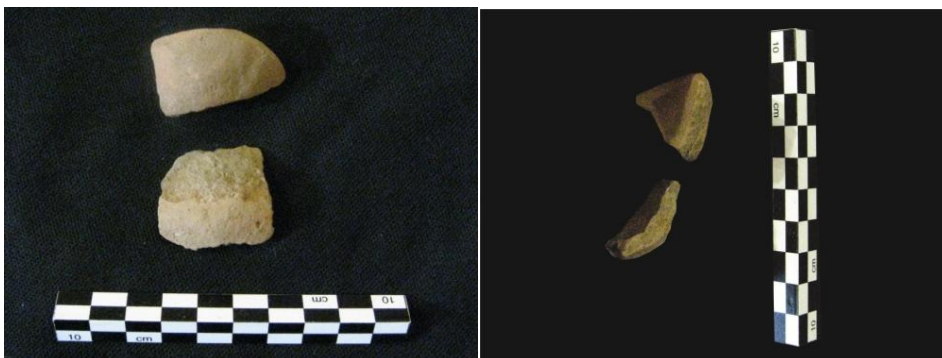
Two small sherds from a very thin-walled (4.3 mm) vessel with a fabric that is sandy with tiny rounded (probably natural) lithic inclusions that are 0.5 mm wide or less. They are brown on the surfaces and the core is black and sooty. The only decoration consists of horizontal rows of twisted cord. The fabric certainly appears here to be Beaker and although they are fragmentary, that conclusion is kept here. In the absence of an associated radiocarbon date or more information on the form of this vessel, the thinness of the sherds and the decoration must be used to infer that they were part of an AOC vessel.

63. Lanton Quarry, Milfield, Northumberland



F181, Pot 179

This base is one of many sherds from an AOComb beaker found at Lanton in a pit with lithic debitage and fragmentary animal bone. The belly appears to have been mid-height and rounded and the base is concave. The transition inside is abrupt with a central cone and fingernail impressions along the edge of the transition shows how and where it was smoothed. A break in the wall shows a coil join, indicating it was coil built. The walls of this vessel are 6 mm thick and the fabric is sandy to touch. Rounded, natural-looking inclusions of red and gray lithic, 1-4 mm wide, are mixed through the fabric and the vessel is well-smoothed on its surfaces. This vessel is orange/red with black patches on the outer surface and black with orange/red patches on the inner surface. The core is dark gray. The base has a diameter of 90 mm. The decoration on pot 179 consists of horizontal rows of comb from a square-toothed comb with 1 mm wide teeth. The comb seems to have been 27 mm long and the arcs of this comb overlap in some places. Inside, there is a stray comb impression as if the comb was accidentally dropped inside the pot as it was being decorated (photo 2). About 45 % of the vessel remains.



F181, P187

Found in the same context as the AOC Beaker, the remains of this little cup are represented by two sherds. They show a simple, pointed rim, curved wall and flat base. The transition is gradual/abrupt and fingernail impressions where the transition was smoothed are visible. The walls are 7.5 mm thick and the fabric is sandy with natural, rounded gravel inside. A slip was put over this and the exterior is brown with red/orange patches, the inside is orange/red and the core is dark gray. The pot is estimated as 5.5 cm tall and the rim diameter is 45 mm. The base was too fragmentary to determine a base diameter. About 10 % of the vessel remains.



F265, sherds 407-9

Three fragmentary sherds with a very similar fabric to the Beaker described above were found in a separate context. The fabric is hard and well-fired and sandy with some natural, dark gray lithic inclusions that are 3-4 mm wide. The colour is orange/red on the surfaces and dark gray in the core. There is no decoration on these sherds and so it is likely they came from a separate vessel, but they are also very fragmentary so it is not to say the vessel was undecorated. These represent less than 0.5 % of the original vessel.

64. Twizell, Northumberland



This sturdy Beaker from Twizell has a pointed rim top and an outward-bending rim that narrows at the neck then bends abruptly out to a high, angular belly that is 13 cm wide. The walls, which are 8 mm thick, then narrow gradually to a wide, flat base that has a slight pedestal. Inside, the transition is abrupt to a flat bottom. In the upper half, the walls have been scraped to thin them (photo 2). The fabric of this vessel is clay-rich comprising dark gray and black lithic inclusions that are 2-3 mm wide. A slip was placed over this and the pot is yellowish/red with reddish patches. Darkening just under the collar inside was noticed. It is 16.5 cm tall, 142 mm wide at the rim and the base is 135 mm in diameter. The decoration on this pot was done using a comb with 2 mm wide teeth and the impressions are particularly deeply-set. It is decorated from rim to base without any breaks. On the neck, elongated triangles that are infilled with vertical lines form the panel above the horizontal rows that surround the narrowest part of the neck. This is repeated below to the belly and on the lower belly, vertical lines fill the spaces between two rows of zigzag, much like that of EE7, the Food Vessel from Darn Hall, Peeblesshire. The panel right above the base has inverted triangles with diagonal lines as fill, mirroring the upright triangles on the upper portions of the pot. This vessel has survived in its entirety and is not listed in Clarke's corpus since it was found after the publication date of that book. However, it would fit into his N3 category and Lanting & Van der Waals' Step 5.

65. Fowbury, Chatton, Northumberland



POA.170



POA.171

From burial 1 in a cist at Fowbury, the Greenwell Collection at the British Museum has the remains of two finely-made Beakers. Clarke (1970, 492) places both of these in his N2 category and they fit into Lanting & Van der Waals' (1974) Step 4 for both form and decoration.

POA.170 is the lower 2/3 of a vessel with a rounded belly that has a distinct curve at its widest point, which is 12.5 cm wide. The walls narrow to a pedestalled, slightly concave base and the transition inside is abrupt with a central cone formed from smoothing this transition. The pot is scraped inside to the base to thin the walls, which are only 6.5 mm thick. The fabric is very gritty with a lot of crushed, dark gray and light gray lithic material that is 1-3 mm in width. Mica was also observed. The pot is slipped on the outside and wiped inside and the surface colour is brick red externally and dark brown internally. The core is black/dark gray. The decoration on this pot is skillfully done with a square-toothed comb with 1.5 mm wide teeth. Horizontal lines are in the neck, followed by two rows of oval, birdbone impressions and this is repeated again. On the belly directly below this are more horizontal lines separating a panel of widely-spaced herringbone that is divided by a single horizontal line, triangular patterns made with three parallel lines and two more rows of oval impressions. The base is encircled by a final two horizontal lines. Only about 40 % of this pot remains and there is a deposit of manganate on the surface. The base diameter is 70 mm.

POA.171 remains as a single rim and base sherd from a pot with a squared rim that bends into a narrow neck, then out to the belly. The base is flat. The walls of this pot are thicker at 8 mm and the fabric is very gritty with crushed, dark gray and black lithic inclusions that are 1-2 mm wide and mica. The pot is slipped and wiped and the mica makes the surface appear to

sparkle. POA.171 is pinkish brown on the outside, brown on the inside and dark gray in the core. The decoration consists of very faint impressions from a square-toothed comb that has 1 mm wide teeth. On top of the rim are diagonal rows of this comb and then a second set of diagonal rows are immediately under the rim outside. Longer diagonal lines are then bordered on the neck with double horizontal grooved rows and below this is a panel of diagonal comb in the opposite direction, followed by two more grooved, horizontal lines. A row of comb is horizontally set near the base. These sherds represent about 5 % of the original pot and only a base diameter could be determined to be 65 mm.

68. Lilburn Hill, Northumberland

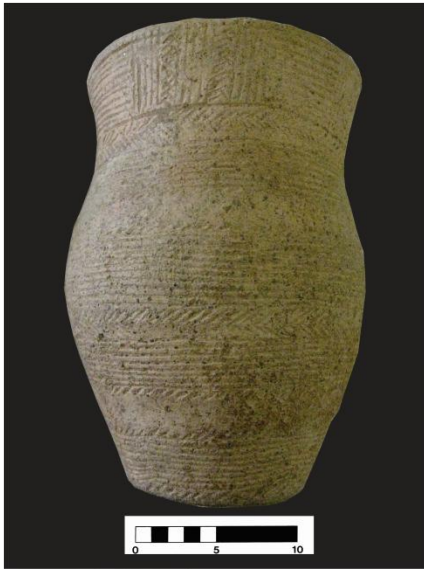


1889.22/1

This crudely-made Beaker has an out-flaring simple rim, bevelled rim exterior and angular belly carination. The walls then bend down to a pedestalled, flat base. The walls are 10 mm thick and the fabric has such a heavy slip that its matrix was difficult to discern. Angular, dark gray lithic inclusions, 2-3 mm wide, were noted. This pot is brick red with a gray slip and there is blackening on the inside of the pot. Its decoration consists of incised lines on the rim top, a row of vertically-incised lines on the rim edge and horizontal rows below this. In the neck bevel is a pattern of converging diagonal lines with several vertical lines at their convergence point (photo 2). This is bordered on the belly carination by a panel of short vertical lines and several, parallel horizontal lines. The lower portion of the pot has diamond patterns surrounding it, although some of the motifs have been half-hazardly incised. Clarke (1970, 492) places this pot into the S4 category, and Lanting & Van der Waals (1974) use it as an example of their Step 6; however, it is argued here that this pot bears so many

characteristics of other local traditions that were in use at the same time that it may really be a local attempt at a foreign-style pot. Although this pot has roughly a Beaker shape, the details of its form, with a neck bevel, carinated shoulder and angular walls that lead to a pedestalled base is very much the shape known for Food Vessels. The walls are also the usual thickness for a Food Vessel, whilst Beakers tend to be thinner. In addition to this, although the decoration has been done in panels with the typically Beaker motifs of horizontal lines that are ‘feathered’ with diagonal or vertical rows, the decoration on the rim top, edge and in diamond patterns is also comfortably placed in other Bronze Age traditions. And the use of grooving, in particular, speaks of Grooved Ware and Tyne-Forth Regional Ware ceramics. The fabric of this pot is also typical of Food Vessels rather than Beakers in its composition and heavy slip, and the presence of blackening up one side of the pot inside may indicate it was fired upside down as Food Vessels were, but Beakers show no indication of. The red colour on its surfaces matches that that seems to have been so desired in Beakers. It is important to note that the decoration on this pot is amateurish and inconsistent and, taken with the heavy, coarse fabric and crude construction, amounts even less to a true Beaker. Food Vessels were often expertly impressed, so it is not correct to say that because the decoration is not as fine as a Beaker that it must have been a local person making it. However, it is possible that this pot could have been made by a local novice who was influenced by the many types of pots they had seen and they were experimenting with the design as they learned how to pot. About half of this pot has survived and it has been reconstructed. It is 16 cm tall and 130 mm in diameter at the rim. The base diameter was not measurable. A heavy deposit of manganate was noted inside the pot near the rim.

70. Ilderton, Northumberland



1910.9

Clarke (1970, 492) places this Beaker into his N/MR class. It is a very large pot with a simple, out-turned rim and rounded belly that stretches to 13.5 cm, and then walls that narrow to a flat base. Inside, the transition is abrupt to a convex base. Seed impressions were noted on the base outside (photo 2). The walls of this pot are 8.5 mm, average for a Beaker, and the fabric is extremely gritty consisting of sand, natural gravel, grog and crushed gray lithic inclusions that are 1-2.5 mm wide. The pot has a thin slip over this and has been fired to a yellowish/brown on the surfaces and dark gray in the core. The decoration is all in rectangular-toothed comb with 1.5 mm teeth in three panels. The first, from the rim to the bottom of the neck begins with vertical panels of horizontal lines, vertical herringbone and vertical lines. Below this is herringbone to the right and then horizontal lines, which is 'feathered' at the bottom with diagonal lines to the left. The second panel begins with diagonal lines 'feathering' to the right, then horizontal lines, herringbone to the right, more horizontal lines and 'feathering' diagonal lines to the left. The final panel begins with opposing 'feathering' lines to the right and then horizontal lines extend to the base. All of the decoration is expertly done and the lines are straight, consistent and it is difficult to make out where the comb lines end and begin. This pot remains in almost perfect condition and there is only a little erosion on the rim. It is 21 cm tall, 140 mm in diameter at the rim and 84 mm in diameter at the base.

71. Seahouses, Northumberland



1910.11

This Beaker, which was found in a cist, is catalogued by Clarke (1970, 492) as S2(E) and by Lanting & Van der Waals (1974) as Step 6. It has a flat rim top and a cylindrical neck, then bends out to a rounded belly, approximately 13 cm wide, then in to a pedestalled, slightly concave base. The transition is abrupt with a central cone. The walls of this vessel are 8.5 mm thick and the fabric is extremely gritty with crushed, black lithic inclusions, 1-2 mm wide. A slip covers most of these on both surfaces and the pot is brown with red patches on the outside, dark brown inside and dark gray in the core. This pot is decorated in three zones: on the neck, at the belly and on the base. All is done in a square-toothed comb that was 7 cm long and had 2 mm wide teeth. The first zone is divided vertically into panels of cross-hatching, vertical herringbone and diamonds with vertical lines for background, each separated by double vertical lines. This is, in turn, bordered to the top and bottom with horizontal rows. The belly zone has horizontal rows that separate a panel of short, vertical lines and a panel of cross-hatching. The base zone then has a diamond pattern, whereby the diamonds are filled with vertical lines and the background has horizontal lines, which is

bordered at the top and bottom with horizontal rows of comb. The horizontal background on this zone was filled in after the pattern was put on the pot as some of the lines cut the diamonds. This pot is partially reconstructed and only about 65 % of it is original. A calcium deposit on one side was observed and a darkened patch was on the other side. Manganate was noted on all surfaces. The Seahouses Beaker is 21 cm tall, 147 mm in diameter at the rim and 73 mm wide at the base.

74. Rock, Ellsnook Wood, Northumberland



1933.8

The Beaker from the barrow at Rock in Ellsnook Wood is classified by Clarke (1970, 492) as an N/MR Beaker and Lanting & Van der Waals (1972) place it into their Step 3 category. It is a heavy vessel that is squat with thick walls. The neck is straight, but slightly outward-bending and the belly is very round with a maximum width of 14 cm. The walls then curve under to a pedestalled, concave base. Inside, the transition is abrupt to a flat base. The walls of this Beaker are 10.1 mm thick and the fabric is gritty with crushed, dark gray lithics, although this is difficult to discern as the pot has a heavy slip on its surfaces. The walls are brick red on the outside, brown on the inside and the core is black. This pot is decorated with five zones of six rows of comb (except for the 1st and 5th zone, which have five rows) from a square-toothed comb with 1 mm wide teeth. Half of the pot is original and it is 19 cm tall, 155 mm wide at the rim and 85 mm wide at the base.

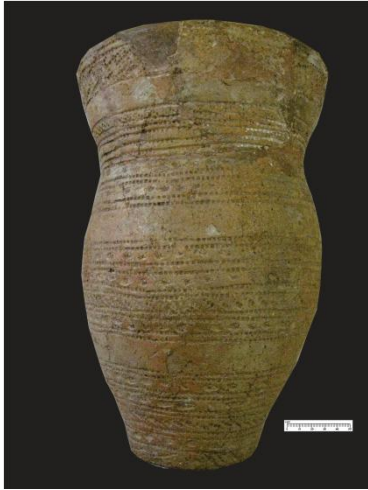
75. Ratcheugh, Alnwick, Northumberland



1879, 1209.1779

The remains of this Beaker were found in a barrow and are in the British Museum in the Greenwell Collection. The are from a pot with a slightly inward-bending rim with a flat top and a rounded long neck. The walls are missing, but they do narrow at a flat base and inside the transition is abrupt to a flat base. The walls of this pot are 10 mm thick and the fabric is gritty with crushed, black lithic inclusions, 4-6 mm wide, and natural, rounded white, pink and light brown lithic inclusions that are up to 8 mm. A slip on the outside covers them. The walls of this pot are red/brown on the outside, light gray inside and the core is black. Only a rim diameter of 170 mm could be determined. The decoration includes a narrow panel under the rim of triangular shapes with a background of vertical lines. This is separated by the next panel with a horizontal line and the the rest of the neck has a pattern of enlarged diamond shapes that are infilled with vertical lines (typical of Clarke's Southern tradition). On the base is another panel of triangles with a background of vertical lines. All of these are done by grooving. About 30 % of this pot remains and Clarke does not include this pot in his corpus, but its shape and decoration would likely place it in the Southern tradition, possibly S3, or Lanting & Van der Waals' Step 6.

79. Hawkshill, Lesbury, Northumberland



1850.15

This Beaker was found in a cist at the same site as the Food Vessel, 1850.16 (described in its respective section). It is a tall, elongated form with a flat rim top, a rounded collar, narrow neck and long, but rounded belly that reaches 14 cm in width. Below this the walls then narrow to a pedestalled, flat base. Inside, the transition is abrupt with a cone in the centre. The walls of this pot are 10 mm thick and the fabric is very gritty with many small, angular, light gray lithic inclusions, 1-2 mm wide. A light slip over this covers but a few of the. The external side of this pot is buff red and the inside is dark brown. The core was not visible. The comb used to decorate this pot was 5.4 cm long and had square teeth that were 1 mm wide. The pot is decorated in four zones: just under the rim, on the neck, just below the belly line and at the base. The uppermost zone has horizontal lines that border a cross-hatched section at the top and bottom. Below this on the neck are two further rows of cross-hatching, each bordered at the top and bottom with a single, horizontal line and then seven rows of horizontal lines fill the narrowest part of the neck. A row of round birdbone impressions is then followed by two rows of horizontal lines and this is repeated once. The belly zone has three rows of birdbone impressions a row of cross-hatching, each divided by a double horizontal row and the base zone mimics this with three horizontal rows of birdbone and one row of diagonal, each with a double horizontal line in between. The entire pot survives and it is 25 cm tall, 160 mm wide at the mouth and 80 mm wide at the base. Clarke (1970, 492) places this pot in the N2 category and it comfortably falls into Lanting & Van der Waals' (1974) Step 4 with its elongated and fluid profile and rare multiple neck lines.

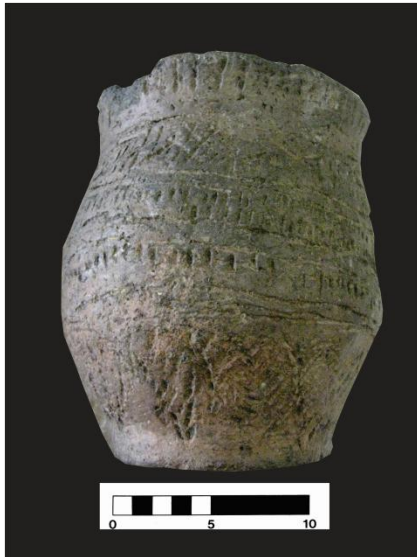
81. Amble, Northumberland



1923.2

This Beaker from Amble, which was found in an inhumation burial, is listed by Clarke (1970, 491) as N3 and Lanting & Van der Waals (1974) as Step 6. It is asymmetrical with a square-ish, insloping rim, long neck with splayed walls and rounded belly that extends to 12.5 cm wide. The lower walls then round in to a flat, pedestalled base. Inside, the transition is abrupt with a slight cone in the centre of the base. The upper 2/3 of the pot is scraped inside to thin the walls – the potter was probably trying to deal with the weight of this pot as it is heavy. The walls, though, are 8 mm thick, well within Beaker range, and the fabric is very gritty with evenly-spaced, crushed, black lithic inclusions that measure 1-2 mm in width. The surfaces are slipped. The exterior of this pot is brown with red patches and the inside is dark brown. The core is gray. Decoration on this pot consists of two panels, one on the neck and the other on the lower belly and all is in square-toothed comb with 1.5 mm wide teeth and a length of 5.6 cm. The neck zone has horizontal lines that separate a panel of two rows of oval impressions, and parallel zigzag with six lines. The lower zone repeats this pattern in mirror image. The entire pot survives and a calcium deposit was noticed near the rim. Also, manganate was observed on the outer surface. The Amble Beaker is 18 cm tall. It has a rim diameter of 134 mm and a base diameter of 86 mm.

82. Horton Castle, Northumberland



1830.3

The pot from Horton is also a very coarsely-made Beaker with walls that are inconsistent in thickness (6.5 -9 mm). It is symmetrical and the decoration is intricate, but the fabric is coarser than is usually seen in Beaker. The simple rim flares outward and the narrow neck almost immediately gives way to a long, wide belly that is 12 cm wide in its roundest part. They then narrow very gently and roundly to a very pedestalled, concave base. Inside the transition is abrupt to a flat base. The pot is well-wiped and striations on the upper half of pot inside indicate that it was scraped to thin the walls. The fabric of this pot is very like Food Vessel – there are many large, angular, dark gray lithic inclusions, about 4-6 mm wide, and a fairly heavy slip to cover these. The walls are dark brown on both sides and the core is black. All of the decoration is done using a rectangular-toothed comb (with 2.5 mm wide teeth) and it is done in three panels. The first panel is under the rim on the outside to the shoulder. There are short vertical lines in a row, followed by three horizontal rows. This is then repeated two more times. The second panel spans just above the belly where the pot is widest and comprises a row of short vertical lines, followed by three horizontal lines and then a final row of short vertical lines. The third panel encompasses the lower 1/3 of the pot and it begins with three horizontal lines and then a pattern of inverted triangles (made of four parallel lines) on one side (photo 3) and then vertical herringbone, diagonal lines, and plant-like V-shapes on the other side (photo 2). All of the decoration is roughly done and impressed deeply in some areas and less so in others. It is not straight or consistent and may be because the pot was decorated by a less-experienced potter, or it may have been the result of such a gritty fabric that would not take the impressions as well. It is not listed in Clarke's corpus, but could fit into the East Anglian group, based on form, but not on decoration. The decoration in three panels, mostly comprised of horizontal and vertical lines fits into the N3 group and both the

form and decoration fit Lanting & Van der Waals' Step 4. However, this pot's coarseness, inconsistent decoration and combination of motifs makes this tenuous. It, again, has characteristics of the locally-made ceramics. About 95 % of the pot remains and it is eroded in some places and has deposits of manganate in others. It is 14.7 cm tall, 116 mm in diameter at the rim and 89 mm in diameter at the base.

83. Dilston Park, Northumberland



Five Beakers were found at Dilston Park in 1906, all in cist burials. Two of these were available for study at the GNM and are listed as 1931.33 and 1931.34. The first is a symmetrical, well-made pot that has a simple, everted rim with straight, but concave neck, and angular, high belly that reaches a maximum width of 11 cm. The walls, which are 6 mm thick, then narrow to a wide, flat base. Inside, the transition is abrupt with a flat base. The fabric of this pot is fairly gritty with about half of its composition comprising dark gray lithic inclusions that are 1-3 mm wide, white lithics, 3-4 mm, and crushed lithic material. A corky texture to the fabric on the inside of the vessel suggests that organic inclusions were also used that burnt out during firing. A heavy slip was placed on top of this and then the pot was scraped to thin the walls on the inside, as seen by striations (photo 2). The outside of this pot is yellowish/brown with red patches and the inside is dark brown. The core is dark gray. This Beaker is small: it is 12.5 cm tall, 103 mm wide at the rim and 80 mm wide at the base. The decoration has been done entirely in square-toothed comb (2 mm wide teeth) and consists of horizontal rows, interspersed with rows of cross-hatching in the belly area. About 95 % of the original vessel remains and there is heavy calcination on one side, presumably the side on

which it lay. Clarke (1970, 492) places it in his N/NR category; however, it bears many characteristics with AOComb Beakers. It fits comfortably into Lanting & Van der Waals' Step 1.



1931.34

The second vessel, 1931.34, has a squared rim with a straight neck that bends in at the bottom. The belly is rounded, reaching a maximum width of 11.5 cm, and then the walls, which are 8.5 mm thick, narrow to a flat base. The transition inside is very abrupt to a flat base with a small central cone. The fabric of this vessel is very gritty with dark gray, crushed lithic inclusions that are 2 mm wide. A dark sparkly lithic material, probably mica, was also observed and much white lithic material (presumed to be calcite) was also noted. A slip covers this and the pot was smoothed before decoration. The decoration on this vessel has been done with 3-4 zones of horizontal grooves. It is light brown on the outside with a brick red slip, light brown inside with darkening towards the base and the core is black. This vessel is also small: it is 15.3 cm tall, 100 mm in diameter at the rim and 75 mm wide at the base. About 60% of the original pot remains and there are deposits of manganate and calcium, demonstrating a wet depositional context.

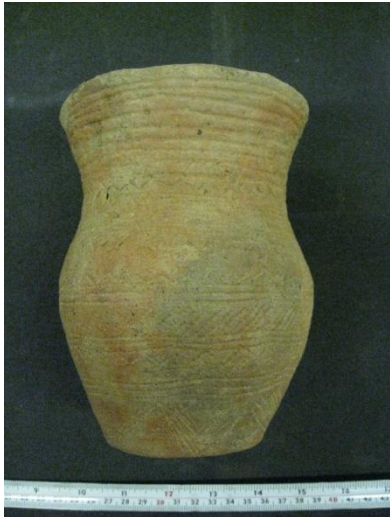
84. West Wharmley, Northumberland



1928.16

Found in a cist burial, this Beaker is catalogued by Clarke (1970, 492) as N2 and Lanting & Van der Waals as Step 3. It has a squared rim that is everted over a concave neck and an angular belly that is set high and reaches 12 cm in width. The lower body is elongated and the base is flat both inside and out, although this is mostly reconstructed so cannot be trusted. The only portion of the transition that remains shows a gradual transition from the wall to the base. The walls of this pot are 7.5 mm thick and the fabric is very gritty with large, crushed lithic inclusions that protrude from the surface. They are, on average, 2-3 mm wide, but some are up to 6 mm, and are dark gray and black. A slip covers these and the walls are medium brown with a yellow under tone. The vessel is 16.7 cm tall, 129 mm wide at the rim and it has a base diameter of 90 mm. The decoration on this vessel was done in five zones with a square-toothed comb with 1.5 mm wide teeth. Just under the rim is a panel of herringbone, followed by four grooved, horizontal lines, and then a row of short, diagonal lines. The neck zone has a row of short, diagonal lines in the opposite direction, then three horizontal grooves and a row of herringbone in the opposite direction to the rim zone. The shoulder zone has a row of herringbone in the same direction as the neck, two horizontal rows and then short, diagonal lines. The lower belly zone has a mirror image of short, diagonal line panels in the same direction, separated by two horizontal grooves, and the final base zone consists of only a row of short, diagonal lines. About 45 % of the original pot still exists in this reconstructed vessel and what is left is heavily eroded on the surface.

85. Altonside, Northumberland



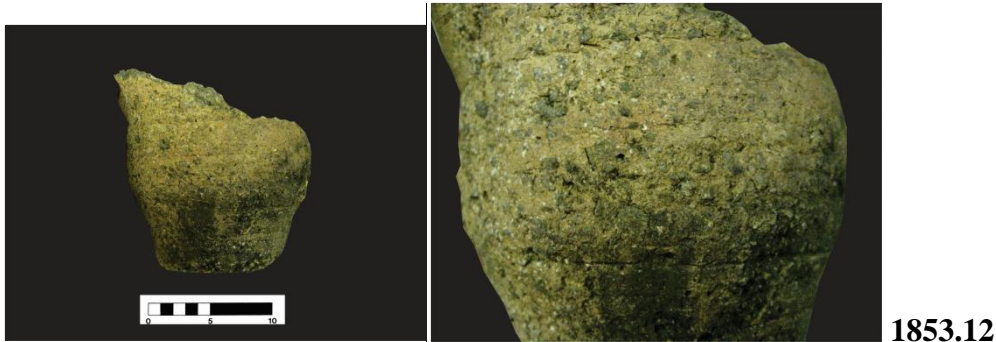
1979.41

This Beaker is registered at the GNM as 1979.41 and was found at Altonside. It has a rounded, simple rim that flares out, a concave neck and a rounded belly that reaches a maximum width of 11 cm. The walls, which are 9 mm thick, then narrow to a slightly concave base with only a hint of a pedestal. The base is flat inside and the transition is flat with only the slightest central cone. The fabric of this pot is gritty comprising angular lithic material, 1-3 mm wide, and some rounded, natural lithics too. It is reddish-brown on the outside and brown on the inside; the core was not visible. The decoration on this pot was done using a square-toothed comb that had 1.5 mm wide teeth. A row of vertical lines was impressed inside the rim and diagonal rows are on the rim top. On the outside of the vessel, three zones of decoration were placed on the neck, lower body and base. On the neck, horizontal rows extend to the neck, followed by a row of zigzag, several more horizontal rows and a final row of zigzag. The body zone is ornamented with a symmetrical pattern that begins and ends with a zigzag row and has horizontal rows inside this on either side of a central row of short, diagonal lines. The lower body then has only horizontal lines and then five, parallel lines in a wide zigzag pattern. The entire vessel has survived in this case and it is 16.5 cm tall, 129 mm in diameter at the rim and 67 mm in width at the base. A light deposit of manganate was noticed on the surface. Clarke does not list this pot in his corpus, but according to his criteria, it would fit best into his N2 category or Lanting & Van der Waals' Step 3 or 4.

A sherd was also found with this Beaker (that does not belong to it) that is listed under the same register number. It is much thicker at 12 mm and has a fabric that is gritty with about half of the matrix consisting of angular lithics that are 6-8 mm wide. This is a rim sherd with a simple rim top (that is slightly flattened) that bends inwards, but comes from an otherwise

straight-necked vessel. Only 6.4 cm of this rim remains and a rim diameter was estimated at 120 mm. It is light brown on the surfaces and dark gray in the core. Horizontal rows of fingernail impressions ornament the outside. Although it is impossible to tell for sure, from the fabric, decoration and rim type, it would seem that this sherd comes from a vessel that is roughly contemporary to Beaker – Tyne-Forth Regional Ware or Bronze Age ceramics.

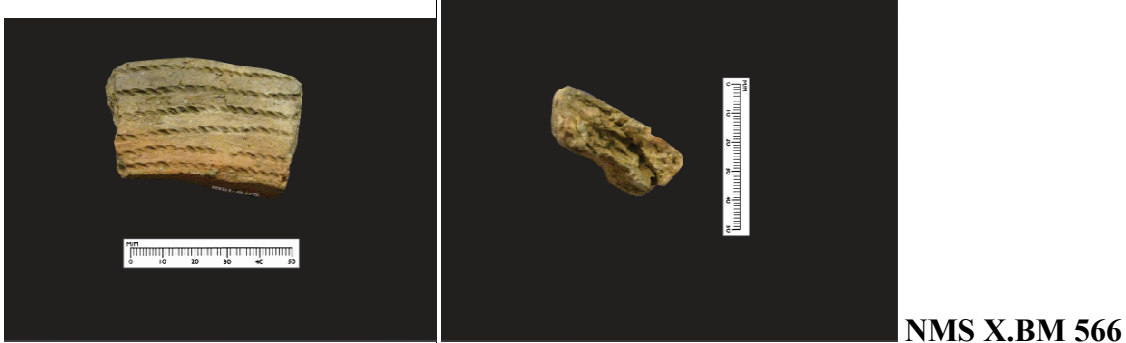
86. Plenmellor Common, Northumberland



This vessel is kept in the GNM under the registration of 1853.12. It is not listed in Clarke's corpus, but would fit the AOC category, or Lanting & Van der Waals' Step 1. The rim of this pot is missing, but what remains is from a small vessel with a flared rim, a low belly that is rounded, and a pedestalled, flat base. The walls are 10 mm thick and the fabric is very gritty with crushed lithic material, 2-4 mm wide, crushed calcite and quartz. If this was covered by a slip, it is entirely eroded away now and only the deepest part of the decorative impressions of cord are still visible. This is twisted cord in horizontal rows across the entire surface of the vessel. The remaining outer surface shows traces of a reddish colour, but the inside is entirely black and burnt. The core is black as well. The height of this pot could not be determined since the rim is missing, but the maximum width at the belly is 10.5 cm and the base diameter is 72 mm. About 55 % of the original pot has survived.

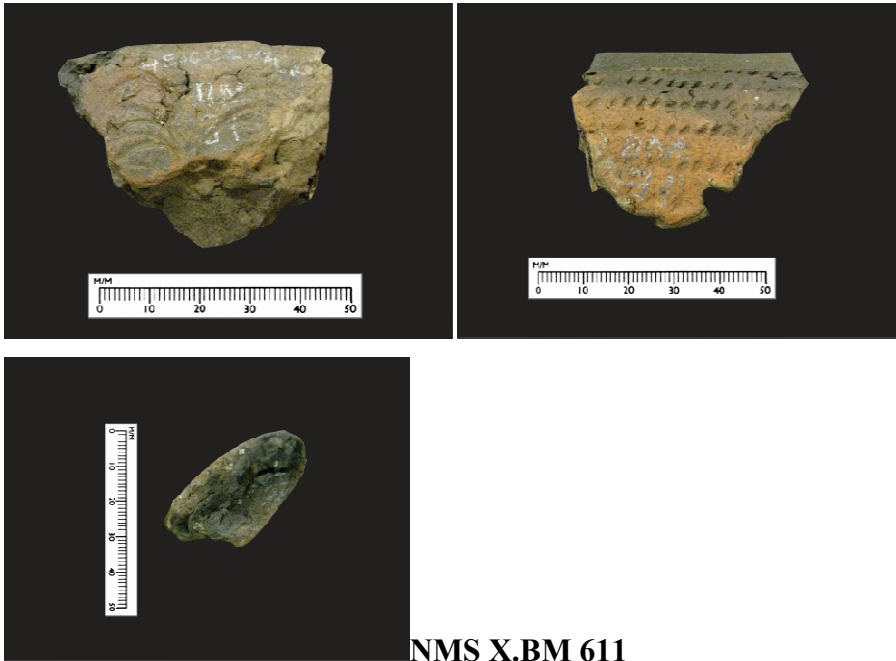
APPENDIX 6: FOOD VESSELS*

1. Hedderwick, Dunbar, East Lothian



Two fragments of Food Vessel were also found at Hedderwick. Weathered out of the old land surface was the rim sherd, NMS X.BM 566, which is classically formed with a flat, insloping rim top that overhangs on the outside and a deeply concave neck. The edge of the rim is flattened and the fabric of this pot was made by adding angular, dark gray lithic inclusions, 5-6 mm wide, to clay that already had some grittiness from natural, rounded, white lithics, 3-8 mm wide. A heavy slip was placed on the surface and the vessel was fired to a dark brown colour on the outside, brick red on the inside and brown in the core. A rim diameter was determined at 240 mm, but this must be taken with caution given the fragmentary nature of the sherd. The rim top was ornamented with horizontal rows of twisted cord (2 mm wide strand) (photo 1) and short, vertically-placed maggots are on the rim edge. Under the rim on the body, the maggot impressions are repeated. This sherd represents about 1 % of the original vessel and it is very eroded at the edges.

*The numbering in this appendix correlates to the site numbers in Map 6.4



NMS X.BM 611

Also found on-site, but not donated until after the death of Dr. J. S. Richardson, was this sherd that is from a different Food Vessel. It is also a rim fragment from a vessel with flat, insloping rim top and a concave neck. It is gritty with many large, black, angular lithic inclusions that are up to 7 mm wide and rounded, white lithics that are up to 4 mm. A slip was applied to both sides and it is black on the outside, brick red on the inside and black in the core. The decoration consists of rows of cord on the rim top and faint (photo 2), grooved arcs on the outside (photo 1) that may be right-handed fingernail impressions. This sherd represents less than 1 % of the vessel.

2. Luffness, East Lothian



NMS X.EE 133

Two Food Vessels were found at Luffness: NMS X.EE 133 and NMS X.EE 134. The first is a Tripartite Food Vessel Bowl and it was found in 1802 and donated to the museum nearly a century and a half later, in 1946. NMS X.EE 133 has an insloping rim and a large bevel just outside this rim on the neck of the vessel. A smaller bevel sits on the shoulder and these two bevels are separated by wide, cordoned ridges. The walls, which are still 10.2 mm wide, despite the size of the vessel, then bend inward below the shoulder to a slightly pedestalled, slightly concave base. Inside, the transition is gradual/abrupt with a flat base. The fabric of this vessel is very gritty consisting of subangular, crushed, dark gray lithic material that is 4-5 mm. A slip is on both sides, although heavier on the outside, and the pot is brown with a dark gray/black core. The pot is entirely decorated with a rectangular-toothed comb with teeth that are 2.5 mm x 1 mm. On the rim are four rows and outside under the rim are three horizontal rows, then a panel of vertical zigzags, followed by more horizontal rows. Over the following

two ridges are rows of short, vertical lines and in the second bevel between these are horizontal lines. This pattern repeats once under the shoulder and then long, vertical zigzags extend to the base. On the bottom of the pot are diagonal lines around the edge, creating a feathered border. The entire pot of EE 133 survives, but there is an extremely heavy deposit of calcium on its surface. It was measured at 14.9 cm tall, 152 mm in diameter at the rim and 80 mm wide at the base.



NMS X.EE 134

NMS X.EE 134 is not mentioned in the Canmore registry, but it is also held in the NMS with NMS X.EE 133. It is the rim sherd that is most likely from a larger pot: this may be Vase Urn, perhaps a Bipartite or Tripartite Vase; however, it is very fine for a Food Vessel at all and so this is taken with caution. In addition, the simple rim curves inward with a neck cavetto underneath, which is more like the Collared Urn tradition. The walls are more typical of the Food Vessel tradition at 10 mm thick and the fabric is characteristic of the earliest Bronze Age with angular, light gray inclusions, 1-3 mm. The pot has a colour more like Beaker as it has the sought-after brick red surfaces and dark gray core. However, the decoration is entirely in twisted cord with zigzag on the collar and horizontal rows in the neck bevel. This sherd represents less than 5 % of the pot it once was and no measurements could be taken from it, but manganate was noted on the inside of this pot.

3. Winton Park, Cockenzie, Midlothian



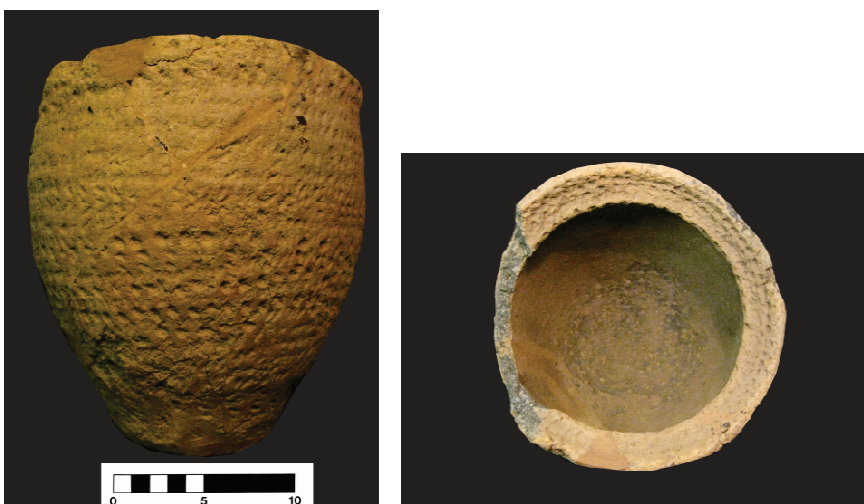
The Bipartite Vase from Winton Park is catalogued as NMS X.EE 122 in the NMS. It has an insloping rim with a well-defined edge that hangs over the inside of the pot. On the outside, the neck is bevelled, but fairly straight, and the shoulder carinated before the walls gently slope in towards a flat, slightly pedestalled base. Inside, the transition is abrupt to a flat base. The walls of this pot are 10.2 mm thick and the fabric is extremely gritty with lithic inclusions. These include very angular, black lithics up to 7 mm, which are clearly prepared, and white lithic pieces and quartz that look more natural. The pot is reddish brown and the core is black. NMS X.EE 122 is decorated entirely with medium twisted cord (2 mm wide strand). There are horizontal rows on the rim top and just outside the rim on the wall. Below this on the neck is a row of short diagonal lines, followed by two more horizontal ones, and then a pattern of triangles, formed by a zigzag. The inverted triangles in this pattern are horizontal and the upright triangles have diagonal lines. On the shoulder, there is a row of short, vertical lines and then four horizontal lines under this. The lower half of the pot has inverted triangles that reach to the base that are infilled with diagonal lines and the pedestal is encircled by horizontal lines. As it is eroded in places, about 97 % of this pot remains. It is 13.7 cm tall and 140 mm wide at the rim. The base is 68 mm wide.

4. Costerton Mains Farm, Blackshiels, Midlothian



This Tripartite Food Vessel Bowl is listed as NMS X.EE 125 in the NMS. It has a flat rim top and a straight neck that ends in a ridge formed by a cordon. Below this is a second bevel with an emphasised shoulder and then the walls narrow towards a flat base. The walls are 10 mm thick and the fabric is extremely gritty with small, crushed black lithic material, 2-4 mm wide. This is slipped on the outside and wiped. NMS X.EE 125 is light brown in colour. It is ornamented on the rim top with two rows of twisted cord (2.5 mm wide strand) and whipped cord maggots on the rim edge. On the two bevels are further horizontal rows of twisted cord with whipped cord maggots on the ridges in between. On the lower body, vertical lines of twisted cord are impressed to the base. This pot is mostly reconstructed and only about 35 % of it is original. The dimensions of this pot are 10.3 cm in height, 120 mm in diameter at the rim and 60 mm wide at the base.

5. Bonnyrigg, Dobbie's Knowe, Lasswade, Midlothian



The Food Vessel from Dobbie's Knowe, NMS X.EE 128, has features like a Ridged Vase, although it is not ridged, as well as characteristics like a Globular British Bowl, although it is vase-shaped. It will, therefore, be called a Globular Vase in this instance. NMS X.EE 128 has a steeply sloping bevelled rim inside and a very slight neck on the outside. The walls are rounded and narrow gently towards the slightly pedestalled, flat base. Inside, the transition is gradual to a rounded base. Two seed impressions were noted on the bottom of the vessel. The wall of this pot are 10.4 mm thick and the fabric is gritty with angular, dark gray lithic inclusions, 2-3 mm and 4-5 mm, deliberately added. A heavy slip on both sides is medium/light brown on the surfaces and the core is dark gray. NMS X.EE 128 is decorated with rows of twisted cord maggots on the rim and external surface of the pot to the base, where a row of vertically placed lines of twisted cord are impressed. About 95 % of the pot remains and it is 17 cm tall, 155 mm in diameter at the rim and 75 mm wide at the base.

6. Parkburn Sand Pit, Lasswade, Midlothian



The Food Vessel from Parkburn is a tripartite Yorkshire Vase that is listed as NMS X.EE 156. It has an insloping rim that hangs over the inside of the pot and a wide neck bevel on the

outside. The shoulder bevel is narrower, although wide for those seen on Yorkshire Vases, and has four evenly-spaced lugs that act as ridge stops. This part of the pot overhangs the lower half and the lower walls narrow towards a pedestalled, flat base. Inside, the transition is gradual/abrupt to a flat base. A seed impression (bottom photo) was noted on the base. NMS X.EE 156 has 10.3 mm wide walls and the fabric is very gritty with many prepared lithic inclusions. These include angular dark gray lithic, 3-5 mm, that appears to sparkle like mica; for this reason it is thought that it may be granite. White rounded/crushed lithic material, 0.5 mm, was also noted. A heavy slip covers these and the pot is brown with red patches on the surfaces. A black stain is on the rim inside. Horizontal rows of twisted cord (2 mm wide strand) ornament the rim top and outside the rim to the shoulder. Below this, in the shoulder bevel, is deeply-incised zigzag, which stops for the lugs. Finally, a herringbone pattern has been impressed around the base and a row of short, vertical lines surround the pedestal. The entire pot has survived and it is 12.5 cm tall. The rim diameter was determined at 130 mm and the base diameter at 66 mm.

7. Fairmilehead, Edinburgh, Midlothian



NMS X.EQ 429 is a Globular British Bowl that has flat rim top and two equally-sized sides that are created by carinations at the shoulder and belly of the vessel. The lower portion is slightly larger and ends in a flat base. The inside of this pot is reconstructed so the transition was not discernable. The walls of this vessel are 10.1 mm thick and the fabric is extremely gritty with added inclusions. These include dark gray and black, very angular lithic pieces that are 2-4 mm and larger. A heavy slip has been put on top of this and covered most of the inclusions that erupted from the surface and the pot is brick red on the outside and black in the core. NMS X.EQ 429 is ornamented with three rows of whipped cord on the rim. From the rim to the belly of the pot is a repeating pattern of three horizontal rows of cord, followed

by a false relief of a zigzag pattern that is created by opposing triangular impressions. This repeats five times, nearly to the base. The bottom $\frac{1}{4}$ of the pot has vertical rows of cord. On the base are parallel horizontal and vertical rows of cord that form a cross. Only about 45 % of NMS X.EQ 429 survives and it is heavily reconstructed. The height was determined to be 10.3 cm and it is 140 mm wide at the rim and 80 mm wide at the base.

8. Merchiston Cemetery, Edinburgh, Midlothian



The pot from Merchiston, NMS X.EE 95, is a Bipartite Vase; however, the base is missing and it appears short, so it may equally be a Bipartite Bowl. It has a flat rim top that slopes in and then a wide bevel at the neck that take up the upper $\frac{1}{2}$ of the pot. This ends at a prominent shoulder carination and then the walls, which are 10 mm thick, bend quickly in to form a vase-shaped profile. This pot has a fabric that is very gritty with deliberately added, very angular, dark gray lithic material that is 5-6 mm and smaller. A heavy slip has been applied to both surfaces and the pot is light brown/yellow on these surfaces and dark gray in the core. The decoration on NMS X.EE 95 is all in the impressions of a loosely twisted cord with a 2.5 mm wide strand. These are in evenly-spaced horizontal rows on the rim top and upper half of the vessel to the shoulder. Only about 20 % of this pot remains and the base is missing so the height and base diameter could not be determined. However, a rim diameter of approximately 125 mm was measured.

9. North Gyle, Corstorphine, Edinburgh, Midlothian



Found in a cist, NMS X.EE 121 is a Tripartite Bowl that is now held in the NMS. It has a flat rim top that hangs over the inside of the vessel. Outside, the neck is divided into two bevelled areas with ridges in between that are formed by cordons. The bottom of these forms a pronounced shoulder, which overhangs the rest of the vessel (something like the pot from Parkburn Sand Pit, but not as extreme as in a more bowl-shaped variety). The walls below the shoulder, which are 10 mm thick, narrow to a pedestalled, concave base. The transition inside is gradual/abrupt with a slightly convex base. It would seem that this might have been caused by drying the pot initially upside down so that the base fell inward. There are fine striations and straw impressions on the surfaces both in and out, suggesting that the pot was wiped with straw or grass. The fabric of the pot is gritty with many angular, black lithic inclusions that are 1-2 mm or less, and sand. Mica sparkles on the surface on the inside. A slip has been applied to both sides, but this is not enough to cover the fabric. Both surfaces are medium brown and the core is dark gray. NMS X.EE 121 has been decorated using a triangular-shaped tool that has been pressed into the clay in opposing positions to create a false relief of a zigzag pattern on the rim top and in both bevels (photo 3). A row of maggot impressions is on the rim edge and on the ridge between the two bevels is a row the same triangular impressions. On the lower half of the pot is a wide zigzag impression made by

long, incised lines, which extends to the base. All of NMS X.EE 121 survives, although there is a light deposit of manganate on the exterior surface. It is 10.7 cm tall, 132 mm wide at the mouth and 57 mm wide at the base.

11. Bridgeness, Bo'ness, West Lothian



NMS X.EE 113

The Food Vessel, NMS X.EE 113, from Bridgeness is a very small Bipartite Vessel that was found, in 1905, as the only vessel in a cist with two inhumations of a man and a child. A second cist with an inhumation contained NMS X.EE 171, which is a larger Hiberno-Scottish Bowl.

NMS X.EE 113 has a flattened, insloping rim that hangs over the vessel inside. On the outside, the wall slopes out from the rim to form a sort of collar that encompasses $\frac{1}{2}$ of the vessel and then a carinated shoulder makes way for narrowing walls to a slightly pedestalled, flat base. Inside, the transition is gradual to a flat base. Marks on the base demonstrate the the pot was seated on a textured material, like straw, when it was wet (photo 3). The walls of NMS X.EE 113 are 10.1 mm wide and are gritty with many prepared, dark gray, crushed and angular lithics included in the fabric. They are, on average, 2-4 mm, but some are up to 5 mm wide. A slip on the outside covers these, but the inside is wiped and many are still visible. The surfaces of this vessel is reddish/brown with blackened patches and the core is dark

gray. It is 8 cm tall, 94 mm wide at the rim and 56 mm wide at the base. The decoration on NMS X.EE 113 is unique, in that a motif (possibly of birdbone) has been used to create semi-circle impressions. Three rows of these are on the rim top, creating a scalloped pattern. On the collar these are used again in vertical rows in every second panel around the pot and every first panel consists of vertical rows of whipped cord. The middle of the pot is defined by three rows of whipped cord, set horizontally, and then four horizontal rows of the semi-circle impressions extend to the base. The entire pot has survived in the cist, but there is a calcium deposit on the outside of the rim on one side. In addition, a white deposit was noted in the impressions of the decoration on the rim. This is reminiscent of the white material (usually, calcite or calcined bone) used in the decoration of many Beakers, so as to emphasise it.



NMS X.EE 171

The second pot found at Bridgeness has a rounded body and an insloping rim. The neck is narrow and the neck bevel is short, compared to the rest of the vessel, and the pot has a flat base. Inside, the transition is gradual/abrupt to a flattish base. The walls are 10.4 mm wide and the fabric is extremely gritty with angular, dark gray lithic inclusions, 5-6 mm and smaller, and quartz. The pot is slipped, which covers most of these and it is brown on its surfaces and gray in the core. The rim is ornamented with rows of twisted cord and this extends outside to the neck bevel. In that bevel is a row of half-moon shaped impressions, made by the fingernail gouging out the clay (photo bottom left), and this is bordered below by a further three rows of rectangular-toothed (2.5 mm long) comb, a row of the half-moon impressions, and three rows of comb. On the body of the vessel is a pattern of a row of different motifs, including vertically-placed, whipped cord maggots, circle impressions with a smaller circle inside (possibly made by a reed, see photo bottom right), twisted cord and half-moon impressions, each divided by several horizontal rows of comb. About 95 % of this pot remains, as there is a large hole in the base, and it is 13 cm tall, 155 mm wide at the rim and 60 mm in diameter at the base. There is a heavy calcium deposit on the rim and up one side of the pot.

12. Cairnpapple, Torphinchen, West Lothian



NMS X.EP 177

In the multi-phase cemetery of Cairnpapple, two Beakers, a Food Vessel and two Collared Urns were uncovered. These are dealt with in their respective sections and the Food Vessel, a Southern Bipartite Vase, NMS X.EP 177, is described here. NMS X.EP 177 is a heavy, squat pot with bevel on the rim top. It has a bevel high on the neck just under the rim that ends with a cordoned ridge and then the walls bend gently out to form a rounded shoulder and then in again down to a slightly pedestalled, concave base. Inside, the transition is gradual/abrupt with a slightly raised centre to the base, although not to the extent of a cone. Scraping was observed under the rim inside the pot in a diagonal motion, presumably to thin the walls, which are (even now) 12 mm thick (see photo 3). The fabric of this pot is gritty consisting of quartz pieces that are 3-5 mm wide and angular, pink/red and light gray lithics. A heavy slip is on the outside, but not inside, and the walls are brick red with grey spots on the external surface and dark brown on the inside. The core is not visible. The decoration on NMS X.EP 177 consists of a wedge-shaped stamp in the bevel on the rim that is set in a row. Under the rim on the outside of the vessel are three horizontal rows of twisted cord, followed by a row of birdbone, half-moon impressions, then two rows of twisted cord. In the second bevel is

another row of the birdbone impressions and the following ridge has four more horizontal rows of cord. Below this are two rows of the birdbone impressions, each with whipped cord under the motif and the lower ½ of the pot is filled with short, horizontal rows of whipped cord impressions. NMS X.EP 177 has entirely survived and it is 14 cm tall. It has a diameter of 138 mm at the rim and 79 mm at the base. A dried residue was noted on the side of the vessel inside and a black, sooty encrustation is just under the rim as well.

13. Cadder, Bishopriggs, Lanarkshire



The Bipartite Vase Urn with a shoulder cavetto, NMS X.EE 130, was found along with a Collared Urn (unavailable for study). It has a heavy, internally bevelled rim that slopes inward and hangs over the inside of the pot. On the outside, a wide neck bevel ends in a very slight carination. Below this the shoulder bevel is a narrow cavetto zone that ends in a second carination and then the walls narrow evenly to a slightly concave base. The transition inside is gradual to a rounded base. The walls of this vessel are about 10.5 mm thick and the fabric is very gritty with subangular quartz pieces up to 6 mm, gravel and sand. The pot seems to have been wiped more than slipped as no real slip could be discerned on its surface and it has a sandy texture. The surfaces are brown and the core is gray. NMS X.EE 130 is decorated with very faint incised lines in a zigzag/herringbone pattern on the rim and external surface. It has survived intact, but there is wear at the edges and on the surfaces. It is 16.4 cm tall, 135 mm in diameter at the mouth and 71 mm in diameter at the foot.

14. Ferniegair, Lanarkshire



Discovered in a Bronze Age cemetery, these two Food Vessels were found in association with the same inhumation burial in a cist. None of the other urns from this site were available for analysis. The first, 1971.415, is a tripartite urn that has a flat rim top that slopes inwards and overhangs the vessel wall on the inside. Two external bevels are on the pot's upper part; the first is half the size of the second and prominent ridges separate the two and border the bottom of the second bevel. The walls then narrow quickly to a pedestalled base that has been hollowed around its edge to make a concave 'ring' around a convex base (photo 3) – a feature unique to this vessel. The transition inside is gradual/abrupt to a flat base. The walls of the pot are 11.5 mm thick and the fabric is very gritty comprised of angular, black and dark gray lithic inclusions that measure between 1mm and 3 mm, although there are a few that are 7 mm wide. A heavy slip covers these on the outside and a moderate slip was applied inside and the vessel is medium brown on both surfaces with a red undertone. The vessel is decorated with a square-toothed comb that had 1.5 mm wide teeth. Diagonal lines were impressed onto the rim top and diagonal lines in the opposite direction on the rim edge. Herringbone in both bevels were then set in opposing directions to one another and separated by a row of comb triangles, set sideways, just above the ridge. On the lower half of the vessel there are vertically-set zigzags to the base. The core is dark gray. This pot is 147 mm wide at the rim. The base has a diameter of 75 mm and it is 13 cm tall. It remains almost in entirety, although there is a chip missing from the rim.



80.30

The second vessel found at Ferniegair in the same cist as 1971.415 is a Tripartite Food Vessel Vase that is listed as 80.30. Its walls are 10.1 mm thick and are made of a fabric that is extremely gritty comprising angular/subangular dark gray lithics that are 0.5-4 mm and crushed light gray lithics. The fabric is otherwise clay-rich and has a sandy texture to the touch. This vessel has a narrow, insloping flat rim with a flattened rim edge. Three external bevels ornament the upper half of the pot and the lower portion is vase-shaped with a flat, pedestalled base. The transition inside is gradual to a flat base. The decoration on 80.30 was done using a comb that had irregularly-shaped teeth that ranged from 2-3 mm in width, fingernail impressions and a triangular-pointed stick. On the rim top, opposing impressions of the stick create a false relief of a zigzag on one side, but on the other, this has been set so that the false relief is that of diamonds. Half-moon shaped impressions on the rim edge, possibly done using the fingernail, are set in a row. In the first bevel there are parallel diagonal lines in triangles with two vertical rows of the triangular stick impressions (photo 3). A horizontal row of the triangular stick was impressed on the first ridge. In the second bevel, a row of diagonal lines, followed by two horizontal rows of comb and a further row of triangular

impressions fill the space and in the third bevel there are two rows of horizontal lines above and below a row of short, diagonal lines. The lower half of the vessel is decorated with horizontal rows of comb to the base. The surfaces of 80.30 are light yellowish brown in colour over a dark gray core. The rim is 132 mm in diameter and the base 74 mm wide and the pot is 12 cm tall. A heavy deposit of manganate was observed inside the vessel, but 99% of it remains intact.

16. Patrickholm Sand Pit, Larkhall, Lanarkshire



NMSX.EQ580

The two Food Vessels from Patrickholm Sand Pit are catalogued at the NMS as NMS X.EQ 580 and 1948.324. The first, NMS X.EQ 580, is a Tripartite Vase with ridge stops in the shoulder bevel. The rim of this pot is flattened, but slightly bent inward to hang over the inside of the pot. A wider, straight neck bevel makes way for a narrower, more concave shoulder bevel that has false lugs that act as ridge stops. The ridges on this vessel are very slight and are more carinations than emphasised ridges. The lower part of the vessel gently bends inward to a pedestalled, concave base. Inside, the transition is gradual to a concave base. The fabric of this pot is gritty with rounded to slightly angular light gray lithic

inclusions. These are 2-3 mm wide and smaller and it is not certain if they are deliberately added or if this clay was naturally gritty. The paste is smooth around this and EQ 580 is brick red on the outside and reddish/yellow inside. The pot is ornamented with rows of comb on the rim top and four rows under the rim on the outside. In the first bevel, a false relief of a zigzag pattern has been made, followed by three more rows of comb. The triangular impressions used to create the false relief appear to have been made using a wooden tool as striations from this tool are in the impressions (bottom photo). The second bevel is filled with vertically-set zigzag of comb and on the lower half of the vessel there are vertical rows of comb. The pedestal is then marked by half of the false relief pattern. This entire pot survives and it is 12.5 cm tall, 140 mm wide at the rim and 75 mm wide at the base. A light deposit of manganate was noted on the rim.



NMS X.1948.324

The second Food Vessel from Patrickholm is a Tripartite Bowl. It has a flat rim top with rounded edges and two wide bevels outside under the rim that are divided by ridges. The lower portion of the vessel gently bends inward with rounded walls to a pedestalled flat base. Inside, the transition is abrupt/gradual to a flat base. The walls of this vessel are approximately 10 mm wide and the fabric is very gritty with many added inclusions. These

include very angular dark gray lithics that are 3-4 mm on average, but some are up to 5 mm wide. A heavy slip was applied to the surfaces and buffed and the pot is reddish brown on the surfaces. A white, ashy deposit was noted in the base inside. This pot has particularly unique decoration and it has been done with experienced skill and artistic talent. It is all in square-toothed comb with 1 mm wide teeth. On the rim are a series of parallel, double vertical rows that create boxes, of which every second one is filled with horizontal rows. This creates the chequer board pattern that is repeated in the two bevels on the outside. The ridge in between these two is then bordered at the top and bottom by opposing fingernail impressions that have been dragged to create half-moon shapes. On the lower part of the vessel are patterns of: a row of short, vertical lines, herringbone and zigzag, each separated by a horizontal row. On the base, six rows of comb form the pattern of a five-pointed star with a plain centre (bottom photo). This pot completely survives and is an example of the work of a particularly skilled artisan. It is 12.4 cm tall, 143 mm wide at the rim and 66 mm wide at the base.

17. Hero's Cairn, Swaitheshill, Lanarkshire



The remains of NMS X.EE 168 consist of several sherds from a vessel with a flat rim top and rim edge and a neck bevel. The largest and most informative of these is pictured here. The wall thickness is 10.1 mm and the fabric is gritty with subangular dark gray lithic inclusions, measuring 4-5 mm, and sand. The edges are very worn, but a slip was noted and the external surface is reddish/brown with a black, sooty deposit on the inner surface. The decoration consists of whipped cord maggot impressions on the rim top and edge and whipped cord lines were visible on the wall exterior. These sherds probably only represent about 5 % of the original pot and they are very eroded.

18. Sherrifflats, Thankerton, Lanarkshire

In addition to the Cordoned Urn, accessory vessel and cinerary urn (all described in their respective sections), three Food Vessels were found at Sherrifflats. These are held in the NMS, marked as NMS X.EA 29, NMS X.EA 30 and NMS X.EE 13.



NMS X.EA 29



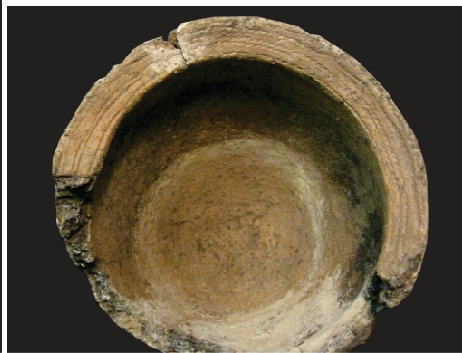
NMS X.EA 30

The site is multi-phased and these urns, themselves, however, appear to have characteristics that demonstrate influences from different traditions and are only subtly Food Vessel in type. The multiple bevels on the walls and the size of the pots are very similar to Ridged Food Vessel Vases, but their decoration is modest (and in the case of NMS X.EA 30, non-existent) and this contrasts to the typical Food Vessel that is more elaborately ornamented.

NMS X.EA 29 is a heavy, thick-bottomed vessel with an insloping rim. On the outside, a double bevel surrounds the upper part of the vessel and then the lower walls, only 13.5 mm thick, bend inwards down to a flat base. Inside, the transition is abrupt to a flat base. The fabric is extremely gritty with angular, dark gray lithic inclusions, 1-2 mm wide, and rounded brown lithic material, 3-5 mm wide. It is likely that this is largely due to a gritty clay source. The pot is slipped on the outside, but the inside reveals this fabric well. Diagonal slashes ornament the rim and on the outside, large zigzag patterns are incised over both bevels. On the lower half, roughly-incised diamonds surround the pot. NMS X.EA 29 is orange-brown on the surfaces. It is 13.8 cm tall, 145 mm wide at the rim and 94 mm wide at the base. About 70% of the pot remains and it has been reconstructed.

NMS X.EA 30 has an insloping rim that bends outwards slightly at the rim edge. This is exaggerated by the first bevel outside the rim, which is followed by a further three bevels and ridges. The walls then gently slope inwards down to a pedestalled, concave base. Inside, the transition is abrupt to a slightly raised base. The walls of NMS X.EA 30 are rather thin, only

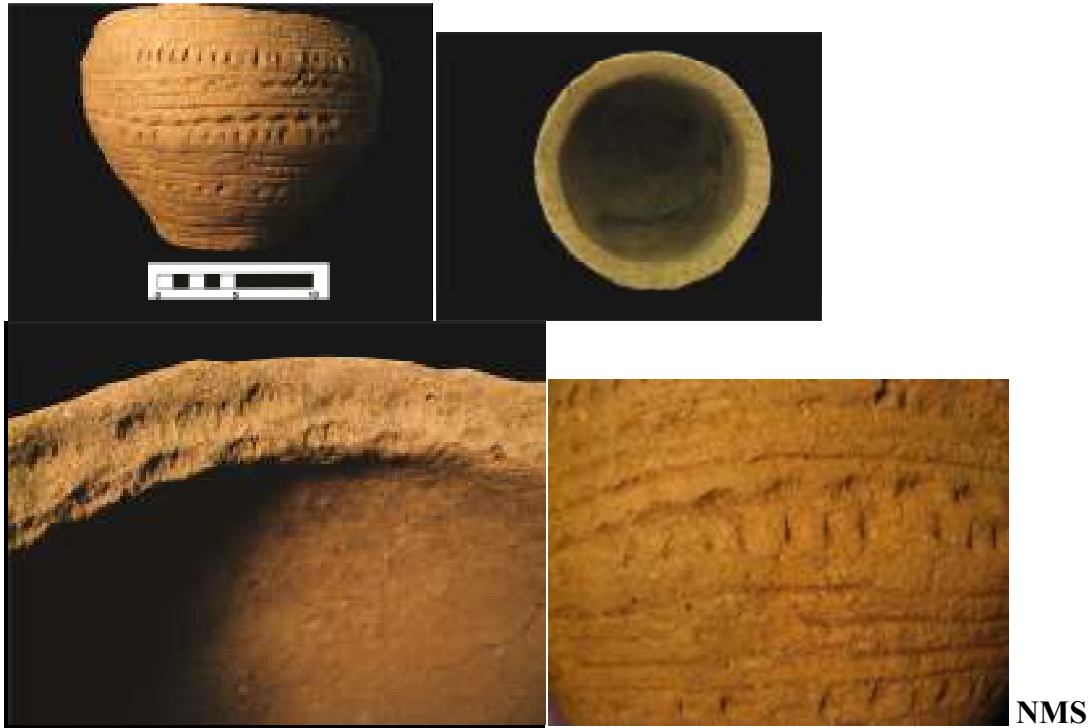
10 mm wide, and the gritty fabric differs from NMS X.EA 27-29 in that very angular dark gray lithic material only comprises about half of the clay. The inclusions are about 5-8 mm wide and are covered by a slip that is pinkish red on the outside and light brown on the inside. This pot is not decorated; it is 14.9 cm tall, 155 mm x 150 mm diameter at the rim and 94 mm in diameter at the base. A light deposit of manganate was observed on the outer surface and there is a blackened patch inside the pot towards the base.



NMS X.EE 13

NMS X.EE 13 differs from the other two Food Vessels because it is more typical of its tradition. It is a Bipartite Vase and has an insloping rim and flat rim edge. The neck is straight, but bevelled inward and is broken by a ridge and narrow shoulder bevel that has three remaining false lugs (it appears there were originally five) that act as ridge stops. The walls then bend quickly inward to form a sharply angular profile to a flat, pedestalled base. The transition inside is gradual to a rounded base. The walls of this vessel are fairly thick at 12 mm and the fabric is very gritty comprising angular, dark gray lithic inclusions that are 3-5 mm wide. The pot is heavily slipped and surfaces are red/brown in colour and the core is black. NMS X.EE 13 is decorated with five rows of twisted cord (1.5 mm wide strand) on the rim top and double rows of this same cord at intervals from the rim to the base outside. It is 14 cm tall, 140 mm wide at the rim and 75 mm wide at the base. About 85 % of this pot remains.

21. West Water Reservoir, West Linton, Peeblesshire



X.1997.1035

Two Food Vessels were recovered from West Water Reservoir in cists with inhumations. The first, NMS X.1997.1035, is a Globular British Bowl and the second, NMS X.1997.1036, is a Bipartite Vase.

The Globular British Bowl has an insloping, bevelled rim that overhangs the internal side of the pot only slightly. The neck is very lightly bevelled and then the walls bend in a rounded form past the shoulder and then narrow quickly to a pedestalled, flat base. The transition inside is gradual/abrupt to a flat base. The walls of this vessel are 10.3 mm wide and the fabric is very gritty with crushed and angular, white lithic pieces 1-3 mm, angular light gray lithics, 3-4 mm, and sand. The surface is wiped and has a sandy texture and there is a possibility of a slip, although it was not obvious. The surfaces are red with brown and the pot is 12 cm tall, 170 mm in diameter at the rim and 82 mm in diameter at the base. On the rim top, two rows of horizontal maggot impressions encircle the pot (photo 3). Just under the rim outside are horizontal grooved rows and this is followed by a row of half-moon impressions, gouged by a fingernail, and then more horizontal grooved rows. The pattern to the base then involves horizontal panels of cord maggots, half-moon impressions and horizontal grooved lines (photo 4).



NMS X.1997.1036

The second pot from West Water Reservoir is a Bipartite Vase with an insloping rim and a straight neck bevel. The shoulder is only slightly carinated and then wide walls narrow to a flat, pedestalled base. Inside, the transition is gradual/abrupt to a flat base. The walls of this pot are also 10.3 mm thick and the fabric is sandy in texture with many lithic inclusions, including natural gravel and added dark gray lithics, 3-5 mm wide. The pot is well smoothed, and possibly slipped, on the surfaces. This pot is medium brown in colour with a darkened patch near the base on one side. It is 13.8 cm tall, 146 mm in diameter at the rim and 76 mm in diameter at the base. The decoration is entirely done with whipped cord. Short vertical lines are impressed into the rim and diagonal lines in vertical rows extend from the rim to the base on the external wall.

22. Darn Hall, Peeblesshire



NMS X.EE 7

Two Food Vessels are recorded from Darn Hall: the first, NMS X.EE 7, is a Bipartite Vase, but with very gently rounded walls, like those at: Broomhill, High Mickley, Castle Hill,

Callaly and Cornhill, all in Northumberland. This pot was discovered sometime before 1872 on the estate in a cist and containing cremated remains. The second, NMS X.EE 120, is a Globular Vase like those found at Sherrifflats (NMS X.EA 29, NMS X.EA 30), Cairnpapple (NMS X.EP 177) and Dobbie's Knowe (NMS X.EE 128). It was found in the late 1920s on the same estate in a separate cist, face-down, when a plough hit the cist lid. There is no indication that these pots are related, but both have the same heavy construction, without an overhanging internal rim, and fine decoration.

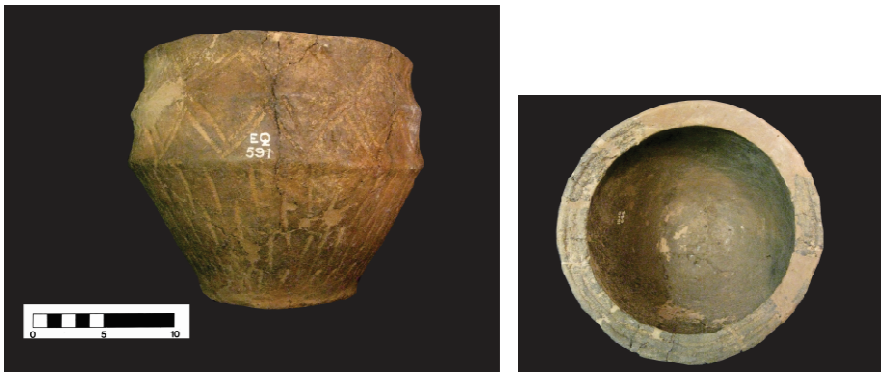
NMS X.EE 7 has a flat rim top with straight neck bevel and slightly pronounced shoulder. The walls, which are 10 mm thick, then gently narrow to a pedestalled, convex base. Inside, the transition is gradual to a rounded base. The fabric is gritty with angular dark gray lithic inclusions that are 1-5 mm and quartz pieces that are 1-2 mm. These were obviously prepared and added to the clay, which was already gravelly. The pot is slipped on the outside and smoothed inside and it is yellowish brown on the surfaces, although darker inside. The pot is 13.4 cm tall, 126 mm in diameter at the rim and 88 mm in diameter at the base. It is decorated all in square-toothed comb with 1.5 mm wide teeth. Vertical lines are closely-set on the rim top and rim edge and horizontal rows are on the neck. At the shoulder is a pattern of two rows of deeply impressed triangles that are made from several parallel diagonal lines set closely together. The second row of this then has an inverted version directly below so that the second row is of a diamond pattern. On the body of the vessel are long rectangular shapes with rounded edges that are infilled with vertical lines of comb. These are opposed with diagonal lines filling in the blank panels between them. At the base, the comb triangular impressions are repeated and then followed by horizontal rows of comb to the base. This pot survives entirely.



NMS X.EE 120

The second pot from Darnhall, NMS X.EE 120, is equally as heavy, but also well-formed. It has an insloping rim with a slight external lip. The walls are then smooth and gently round down to a pedestalled, flat bottom. Inside, the transition is abrupt and there are fingernail marks visible where the transition was smoothed. The base inside is slightly concave. The walls of this pot are thick, 14 mm, and the fabric is extremely gritty comprising black, crushed lithic inclusions, 0.5-2 mm wide, mica and white lithic flecks. It is important to note that this fabric is similar to that seen on local Beakers with the crushed lithic inclusions, composition and slip. However, the walls are yellowish brown (despite the colour of the above right photo) and the core is black. NMS X.EE 120 is decorated on the rim with vertically-placed grooves on one side and left-handed fingernail impressions on the other side. There are four horizontal grooves on the upper 1/3 of the exterior of this vessel and then rows of left-handed fingernail impressions to the base. The entire pot survives to this day and it is 14 cm tall, 146 mm wide at the rim and 85 mm wide at the base. A black residue was noted up one side of the vessel inside.

24. Redden Farm, Sprouston, Roxburghshire



NMS X.EQ 591 is a Tripartite Vessel with slightly bevelled rim top and two wide, straight bevels on the upper part of the pot under the rim. The shoulder is pronounced with a cordoned ridge and the walls then gently narrow to a pedestalled, flat base. Inside, the transition is gradual/abrupt to a slightly convex base. The fabric is gritty with very angular, black and dark gray lithic inclusions, 2-4 mm, that have obviously been prepared and added, as well as more natural rounded, black lithic pieces. A heavy slip has been placed over this, which has peeled away in many places. The outside of NMS X.EQ 591 is brick red with black patches and the inside is dark gray with brown underneath. The pot is decorated on the rim top with horizontal rows of cord impressions. In each external bevel, there is a zigzag pattern made by a double row of cord and these oppose one another so that the overall effect

is a diamond pattern divided by a ridge. The lower half of the pot is covered by short, vertical lines in cord. The cord used on this pot is very fine with the strand thickness less than 0.5 mm. The height of this pot is 12 cm and it is 140 mm at the rim. The base diameter is 85 mm. About 95% of this pot remains as it is reconstructed on one side of the rim and a heavy deposit of manganate was observed on the external surface.

25. Yetholm, Kelso, Roxburghshire



This beautifully well-made little pot is registered as NMS X.EE 3 at the NMS. It has a flat, insloping rim with a rounded rim edge and a wide neck bevel. The shoulder has a very small bevel to it and then the walls narrow to a slightly pedestalled, slightly concave base. Inside, the transition is abrupt to a flat base. A seed impression was noted just under the rim on the inside of the pot (bottom photo). Despite its small size, NMS X.EE 3 has the usual wall thickness of 10.2 mm, and the fabric is very gritty. These are light gray and angular and average at 3-5 mm. A heavy slip was applied and fired to a medium brown with red undertones. NMS X.EE 3 is decorated on the rim top with horizontal rows of fine twisted cord (1.5 mm wide strand) with half-moon shaped impressions in between. These same half-moon impressions, made by a fingernail gouging out the clay, are on the rim edge. On the neck bevel, parallel, diagonal lines of cord form a pattern of triangles around the pot and this

is bordered above and below by a horizontal rows of cord. Under the shoulder bevel, six parallel rows of zigzag in cord encircle the pot, forming an inverted triangular pattern and this is then bordered by horizontal rows. NMS X.EE 3 has survived in its entirety and it is 9.3 cm tall, 115 mm wide at the mouth and 65 mm wide at the base. A light deposit of manganate was noted on the external side.

31. Heiton Mill, Kelso, Roxburghshire



The vessel from Heiton Mill, NMS X.EE 124, is very different from other Food Vessels and does not fit into any one group. It has a form like a Globular British Bowl, but it is handled with four perforated lugs at the shoulder and it has a pedestalled base. The rim slopes inwards and the neck is straight with a very slight bevel under the rim. The base is flat both inside and out and the transition is abrupt. The walls of this pot are 10.4 mm thick and the fabric is very gritty with angular black lithic inclusions, 3-4 mm wide, and gravel. A heavy slip is over this and the pot is medium brown on the outside, gray inside and dark gray in the core. The top of the rim is decorated with three rows of impressions from a pointed stick that create a false relief of a zigzag pattern. This is also on the rim edge and in the neck. Below this are three horizontal grooves and then a panel of incised diamonds. Horizontal grooves encircle the pot,

stopped by the perforated lugs, which are covered in rows of fingernail impressions from the right hand. Along the bottom third of the lugs is a second panel of incised diamonds. Under the lugs are horizontal grooves, which bend up and meet in a point below the lugs in a draping pattern. Then there are impressions from the pointed stick to the base. About 70 % of NMS X.EE 124 has survived and it is 16 cm tall, 170 mm in diameter at the rim and 87 mm in diameter at the base. A medium amount of manganate is deposited on the surface of the pot.

32. Longcroft, Lauderdale, Berwickshire



The Food Vessel from Longcroft is a Tripartite Food Vessel Bowl and it is listed as NMS X.EQ 616 in the NMS. This was found in the same provenance as NMS X.EQ 617, a Collared Urn that is described in its respective section. NMS X.EQ 616 is slightly asymmetrical and has a rim that slants inward on the inside, and down on the rim exterior rim edge. A smaller neck bevel is below this with a larger, straight bevel that ends in a shoulder carination. The lower half of the bowl then gently narrows to a pedestalled, flat base. Inside, the transition is gradual to a flat base. The walls of this pot are fairly thin, about 9 mm wide, and the fabric is gritty with lithic inclusions. These are rounded to subangular, are light gray and are about 2-3 mm wide; they appear to have been crushed in preparation. The walls of NMS X.EQ 616 are brown on the outside with black patches and reddish brown inside. The decoration has been entirely done with whipped cord. Diagonal rows ornament the rim top and outside on the rim edge, more diagonal rows in the opposite direction are impressed. On the neck, horizontal rows extend to the first bevel, and in the second bevel, converging diagonal lines creating a pattern of diamonds, is bordered on the upper and lower ridges with a horizontal row of stabmarks. On the lower half of the vessel, vertical zigzags extend to the base of the pot. EQ 616 was found to be 11.5 cm tall, 140 mm wide at the mouth and 75 mm wide at the base. A light deposit of manganate was noted on the external surface.

33. Edington Mill, Chirnside, Berwickshire



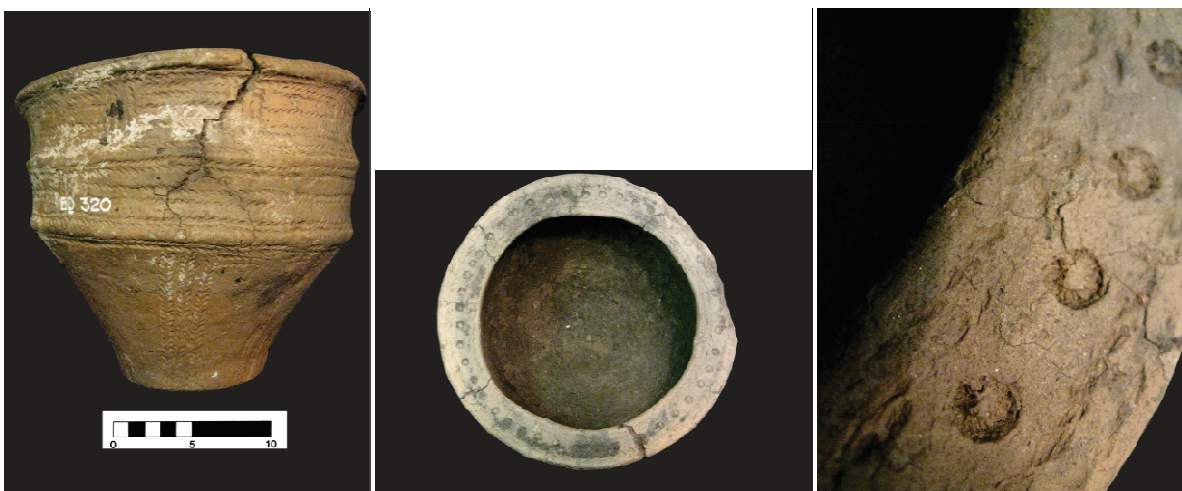
The Bipartite Vase from Edington Mill is catalogued as NMS X.EQ 323 in the NMS. It has an insloping bevelled rim with a straight neck bevel and a second, smaller bevel at the shoulder that is divided by ridge stops at four places along the pot. The walls, which are 10.5 mm thick, narrow in a vase-shaped profile to a slightly concave base. The transition inside is gradual with a rounded base inside. The fabric is very gritty with dark gray, subangular lithic inclusions, 3-4 mm wide and a heavy slip covers most of the surfaces, which are medium to dark brown. The decoration has been impressed using fine weighted (1 mm strand) twisted cord. There are horizontal lines on the rim top with short vertical lines at the edge of the rim and on the neck are a further five horizontal rows. Under this in the neck bevel are diagonal lines of cord which oppose one another on either side of the pot to form a V on one side and a triangle on the other. There are then horizontal lines into the shoulder bevel and a row of vertical lines at the bottom of this. The ridge stops in this bevel are pinched up from the sides of the pot and this is accentuated in the decoration on them. Below the shoulder bevel, there are a further three horizontal lines of cord, which follow the contours of the ridge stops and thus have a draping pattern to them. There is then a row of short vertical impressions of cord that does the same thing. This pattern then repeats to the base, ending with the row of vertical lines. This lovely pot has survived very well and it is 14.5 cm tall. The diameter at the rim is 150 mm and at the base, it is 70 mm wide.

34. Hagg Wood, Foulden, Berwickshire



NMS X.EQ 315

The bipartite vase, NMS X.EQ 315, is one of two Food Vessels found at Hagg Wood. It is a very heavy pot (even for a Food Vessel) with an insloping rim and external rim bevel that ends in a pronounced shoulder. The walls then narrow in a vase-shaped profile to a very pedestalled, concave base. Inside, the transition is abrupt to a flat base. The pot is particularly symmetrical and the upper half inside is scraped to thin the walls. The walls of this pot are 10.3 mm wide and the fabric is extremely gritty comprising of medium, very angular, gray lithic inclusions, 3-5 mm wide. A heavy slip has been applied to all sides, which covers most of this, and the pot is reddish brown with a grey core. A blackened deposit was observed inside the pot near the base and up one side. The decoration on this pot consists of whipped cord herringbone on the rim top and outside the rim to the shoulder. The bottom half of the pot has diagonal lines of twisted cord and, in one place, an opposing diagonal line creates a triangle. The entire pot survives and it is 15.5 cm tall. The rim diameter is 155 mm and the base is 72 mm wide.



NMS X.EQ 320

The second pot found at Hagg Wood is a Tripartite Vase. It has a flat rim top that has been pressed down to overhang inside and the rim edge is flat on the outside. Under this are two straight neck bevels with slight ridges inbetween and the shoulder is carinated. Under this, the walls, which are 10.5 mm wide, narrow so quickly that they almost have concave profiles, and the base is very pedestalled and flat. Inside, the transition is gradual to a rounded base. Like NMS X.EQ 315, this pot is scraped on its upper half inside to thin the walls. The fabric of NMS X.EQ 320 is extremely gritty with added very angular dark gray lithic inclusions, 4-7 mm, and natural rounded white lithics 4-5 mm. A heavy slip on the outside covers these and the pot is medium brown with red undertones on the outside, dark brown inside and dark gray in the core. The residue of a brown substance goes up the side of the pot inside. This pot is beautifully decorated with a double twisted cord (2 mm wide strand) in a false plait motif in two rows above and below a row of birdbone impressions on the rim top (photo 3). In the upper bevel on the neck, three rows of this plait have been impressed horizontally and this is broken by double vertical rows evenly dispersed around the pot, which mimics ridge stops. To just below the shoulder are further rows of horizontal false plaited cord. On the lower half of the pot there are panels of vertically impressed rows of false plaited cord, bordered at the sides with a row of twisted cord, each separated by plain panels. About 95 % of this pot remains, the rest having been reconstructed, and it is 14.7 cm tall, 162 mm wide at the mouth and 70 mm wide at the base.

36. High Cocklaw, Berwickshire



The tripartite vase, NMS X.EQ 378, from High Cocklaw is a crudely-made pot that has almost entirely survived, but has been reconstructed. It has a flat rim top with two external bevels, separated by a slight ridge. The shoulder is very slight, but the pot then bends inward in a vase-shaped profile to a very pedestalled, flat base. Inside, the transition is abrupt to a flat base. The walls of this pot are of average thickness, 10.1 mm, and the fabric is typically very gritty with prepared angular, gray lithics, 2-4 mm wide. A very heavy slip was applied to cover these and the pot is medium brown throughout. NMS X.EQ 378 is decorated with stab impressions from a stick with a roughened edge that is square in shape. These are impressed on the rim top and vertical lines of this impression have been placed in four rows in the bevels down to the base pedestal. This pot is 13.3 cm tall, it has a rim diameter of 55 mm and a base diameter of 80 mm.

42. Murton Farm, Northumberland



Presumably, this is one of the urns discovered in the 19th century and is listed in the *BNC*, vol. 1. It has an acquisition number of 1966.4, but there is no publication from that time that claims this pot, and it could easily have been kept by antiquities enthusiasts until the 1960s, even though it was found earlier. It is a Southern Bipartite Vase and has an everted rim, internally bevelled, with a gentle neck bevel that bends out to a rounded shoulder. The walls, which are 10.5 mm thick, then bend in down to a concave base with a pedestal. The transition inside is fairly gradual to a flat base. The fabric has many angular, black and dark gray, prepared inclusions that are mostly 2-3 mm wide, but some are up to 5 mm. The clay is rather gritty. The pot is dark brown on both surfaces and black in the core, but it has been treated with liqueur or a substance of this type, typically used in the mid-20th century to preserve

ceramics, and so the colour is likely more due to this than the natural clay composition. This vessel is decorated using deep grooves as the main motif. There is herringbone on the rim top that has a horizontal line cutting its centre, which creates a vine pattern. At the rim edge, diagonal lines are grooved and under this, vertical zigzag is incised to the base with the only break in the pattern at the shoulder. Scraping was noted just inside the rim to hollow underneath it so it overhangs inside the pot (photo right). The entire pot from Murton Farm has survived and it is 15 cm tall, 150 mm in diameter at the rim and 75 mm wide at the base.

43. Cornhill, Northumberland



The Food Vessel from Cornhill, 1929.66 at the GNM, is a heavy pot with an inturning rim that has a slight external bevel under the rim, ending in a pronounced shoulder. The walls, which are 10.3 mm wide, then narrow towards a concave base. Inside, the transition is abrupt/gradual to flattish base. This bipartite vase has sandy fabric with many natural inclusions and some purposely added ones. Angular, light gray lithics 4-5 mm wide and angular pieces of quartz, 4 mm wide, were prepared, but rounded pebbles, up to 12 mm wide, white flecks of lithic material and sand appear natural. A sandy slip was added to the surface and they are dark brick red on the outside, dark brown inside and dark gray in the core. The decoration consists of two horizontal rows of birdbone impressions on the rim top and further horizontal rows of birdbone, evenly spaced, from the rim to the pot's base. This pot remains in its entirety and it is 14.5 cm tall, 150 mm wide at the rim and 80 mm wide at the base. There is a light manganate deposit inside and a dark stain on the base and up one side discolours the surface.

44. Ford, Northumberland



1879, 1209.1401

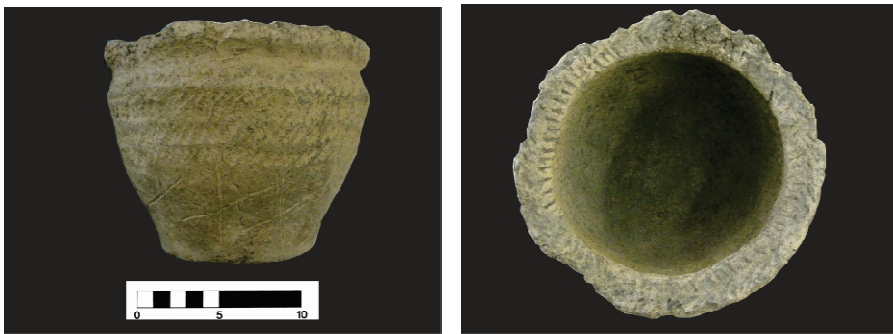
This small pot with an insloping, bevelled rim is a Bipartite Vase with a shoulder cavetto. It has a wide bevel under the rim to the shoulder, which is bevelled with a very narrow cavetto, and then the walls bend in toward a slightly concave base. Inside, the transition is gradual to a rounded base. Although the walls of this pot are thinner than usual, 9 mm, the fabric is still very gritty with many angular, dark gray and black lithics, which measure up to 4-5 mm. A heavy slip covers the outside and the inside is wiped. This pot has pinkish brown surfaces with a dark brown core. Incised lines in a zigzag pattern ornament the rim and the body of this pot to the base, omitting the shoulder cavetto. The entire pot survives and it is 10.2 cm tall, 110 mm in diameter at the rim and 50 mm in diameter at the base.

47. Dour Hill, Byrness, Northumberland



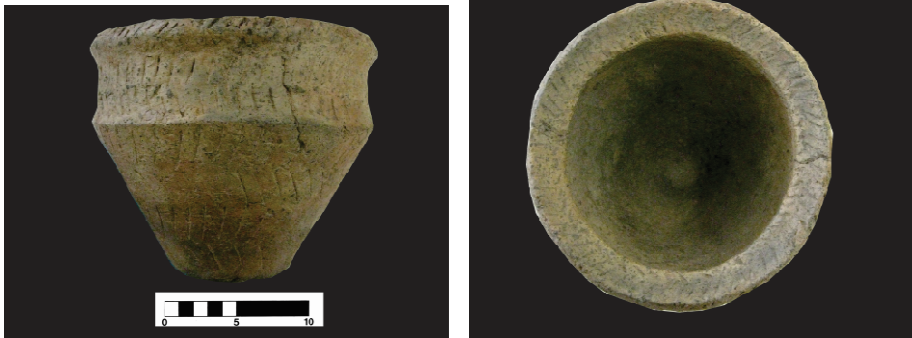
The tripartite vase from Dour Hill is one of two Food Vessels from the site, but the only one available for examination at the time of study. It is a very heavy, coarse pot with a flat, insloping rim, a double bevel in the upper half of the vessel and a carination at the shoulder. The lower half bends abruptly into a vase-shape to a very pedestalled, flat base. Inside, the transition is gradual to a rounded base. The walls of this pot are 10.3 mm wide and the fabric is extremely gritty with dark gray and black, angular lithic pieces, 5-7 mm wide and many that are larger. An extremely heavy slip is well-wiped and buffed, but lithics still erupt from the surface. The surface is medium brown on the outside with red splotches, brown on the inside with a sooty black residue up one side and the core is black. The only decoration on this pot is very faint twisted cord on the rim (1.5 mm wide strand) and vertical grooves on the edge. The entire pot survives, but there is a heavy deposit of manganate on the side. It is 11.4 cm tall, 155 mm in diameter at the rim and 70 mm wide at the base.

50. Haughhead, Wooler, Northumberland



This Food Vessel is a Bipartite Vase that is recorded as 1923.2 in the GNM. It has an insloping rim top with a flat edge on the outside and a narrow neck bevel. The shoulder is sharply carinated and the walls then bend inward towards a wide, pedestalled, flat base. Inside, the transition is gradual/abrupt to a flat base. The walls of this pot are 12.5 mm wide and the fabric is extremely gritty with added angular, black lithics that are 3-5 mm wide. There is a light slip on the outside and the pot is light brown on the outer surface, dark brown on the inner surface and gray in the core. This pot is decorated with incised herringbone on the rim top and edge. From the shoulder to the belly are five evenly-spaced rows of short diagonal cord impressions, and underneath are vertical grooves divided by diagonal grooves that create X shapes around the base. Just about all of this pot survives, but there is a deposit of calcium on the rim, manganate on the outer surface and blackening towards the base inside. It is 10 cm tall, 125 mm in diameter at the rim and 75 mm in diameter at the base.

51. Hawkshill, Lesbury, Northumberland



Found in association with a Beaker (described in the Beaker section), 1850.16 is in the GNM in Newcastle. It is a Bipartite Vase with an inturning rim and a very shallow neck bevel under the flat rim edge. The walls then bend dramatically in towards a flat base after the sharply carinated shoulder. The transition inside is gradual to a rounded bottom. The walls of this vessel are about 10 mm wide and the fabric is extremely gritty with angular, dark gray lithic inclusions, 3-5 mm wide, and sand. A slip over both sides is brick red on the outside, brown with blackened patches near the bottom on the inside, and the core is gray/red. This pot is decorated on the rim with incised herringbone. This same pattern is in the neck bevel as well, but the individual lines of the herringbone are longer and on the body they are longer still. The decoration extends to the base. The entire pot survives, although there is a light deposit of manganese on the surface. It is 12.5 cm tall, 145 mm in diameter at the rim and 66 mm in diameter at the base.

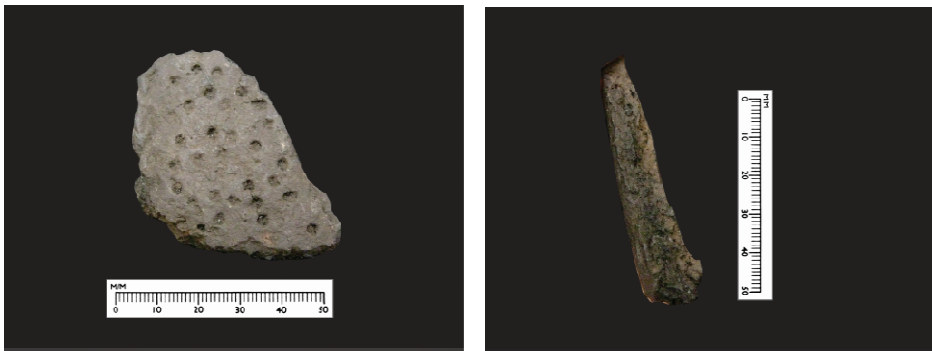
54. Spindleston, Northumberland



1879. 1209, 1774

Two pots are listed from Spindleston in the Greenwell Collection at the British Museum: 1879, 1209.1774 and 1879, 1209.1775. These are a tripartite vase and the base of an urn,

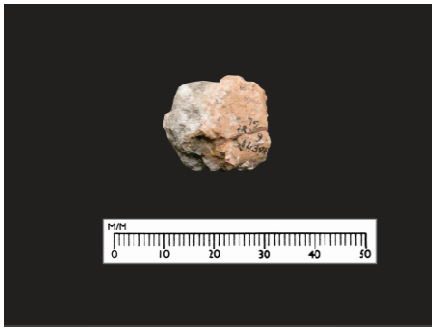
respectively. The first (pictured above) has a heavy, bevelled rim top that slopes inward. Outside, the rim is flat on the edge and two wide bevels are below this, separated by light ridges. The walls are thick at 21 mm wide, and the fabric is extremely gritty with very angular dark gray and black lithics, 7 mm wide, and grog. As a result, the fabric is very crumbly and friable. A slip on the surfaces covers this and the pot is dark brown with a red undertone on the outside, black on the inside and in the core. The decoration on this pot consists of vertical zigzags of incised lines on the rim top, rim edge and walls of the pot in the bevels and over the ridges. This rim represents about 10% of the original pot, but a rim diameter was determined at 300 mm wide.



1879.1209, 1775

The second pot is only a base sherd, but it is atypical of a Food Vessel although it has been registered as one. The walls are fairly thin at 10 mm, and certainly thinner than 1774, which was found at the same site. The walls are splayed and the base flat and the fabric is gritty comprising angular black lithic material, 4-5 mm wide. This sherd is black on the outside and dark brown on the inside and black in the core. It has converging twisted cord that forms a triangle on the outside that is filled with stabmarks. Although very little of this pot remains, about 1% or less, the fabric, form and decoration bears characteristics of Neolithic forms and Beaker that are not usually seen in this combination in Food Vessel. The context of this sherd, in a round barrow and found with a Food Vessel, suggests that it may be older and residual. The characteristics themselves are more similar to the Tyne-Forth Regional Ware.

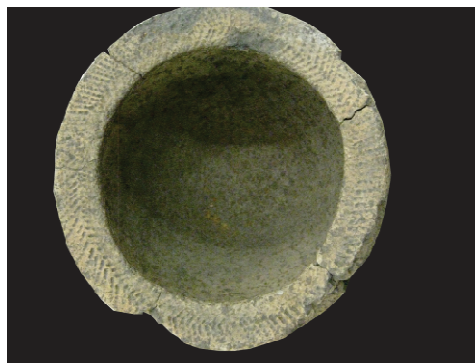
57. Eglingham, Harehope Moor, Northumberland



1879, 1209.1438a

This tiny fragment of pottery is in the Greenwell Collection at the British Museum and was found in Barrow 201, burial 1. It is only a little fragment from a coarse pot, likely a Food Vessel. It has a very gritty fabric with rounded white and red lithic pieces, 4-5 mm, and angular, gray lithic inclusions, 2-3 mm. A slip overtop has been fired brick red on the outside and the core is dark gray. This represents less than 1 % of the original pot.

58. Rodram, Northumberland



The Food Vessel from Rodram, 1907.6c, is a tripartite vase that is currently held in the GNM in Newcastle. It has a flat, insloping rim with two external rim bevels. The walls, which are 10.5 mm wide, then bend inward gently down to a flat, pedestalled base. Inside, the transition is abrupt to a flat base. The fabric of this pot is slightly gritty with angular dark gray lithic pieces, 5-6 mm wide and smaller. A heavy slip on the outside covers this and it is fired brown with red undertones on the outside and brown on the inside. A darkened patch was noted near the base on the inside. The pot is decorated with square-toothed comb, 1.5 mm wide teeth, on the rim in a herringbone pattern. Two horizontal rows of comb are then under this. In both

bevels, triangular impressions, which create a false relief of zigzag, encircle the pot, and in the second bevel, four false lugs acting as ridge stops are evenly spaced and impressed with horizontal rows of comb. On the lower body of the pot, alternating diagonal rows of comb create triangular patterns and beneath this are nine horizontal rows of comb around the base. About 97% of this pot remains and it is 13 cm tall, 153 mm wide at the rim and 77 mm in diameter at the base.

64. Castle Hill, Callaly, Northumberland



The Food Vessel from Castle Hill is listed as +034 in the GNM; it is Hiberno-Scottish vase. It is a heavy pot with a flat, insloping rim. A rim bevel under the rim ends in a high, carinated shoulder and then the walls bend out and down to a flat base. The overall profile is rounded, but elongated. Inside, the transition is abrupt to a flat base. The wall of this pot is eroded near the base, revealing a clear slab join at the base wall. The walls are 10 mm wide and the fabric is extremely gritty with a lot of gravel and stone inclusions and sand. The surfaces of the pot are yellowish brown with gray overtop. They are decorated with loosely twisted cord with a 2 mm wide strand. Two curved lines ornament the rim and a further three curved lines are under the rim on the outside. On the body, three curvilinear lines are followed by four

horizontal, three curvilinear, two horizontal, and two curvilinear. About 95 % of the pot remains and it is about 14.5 cm tall, 150 mm wide at the rim and 80 mm wide at the base. A light manganate residue was observed on the surface and a slight sootiness was noted on the base inside.

66. Ratcheugh, Alnwick, Northumberland



1879, 1209.1768

This flat-rimmed, heavy vessel is in the Greenwell Collection at the British Museum under the listing of 1879, 1209.1768. The shape of the rim and body are similar to an Irish Vase, but without more of the body, this pot could equally be Impressed Ware, like the mistaken sherds from Ford that Longworth (1969) reviewed. The rim of this vessel is flat on the outside and then there is a deep bevel at the neck that ends in a carinated shoulder. Below this the wall, which is 23 mm wide, narrows. The fabric is extremely gritty comprising very angular dark gray and black lithics, 6-9 mm wide and smaller. The pot is heavily slipped on both sides and is dark brown on the surfaces and black in the core. It is decorated with heavy twisted cord (3-3.5 mm wide strand) in short, vertical lines on the rim and rim edge. Longer vertical rows of this are on the body under the bevel. This rim sherd represents only about 40% of the original vessel, but a rim diameter of 280 mm could be determined.



1879. 1209, 1769

The second pot listed by Canon Greenwell is 1879, 1209.1769. It appears to be a tripartite vase, but a possible third bevel on the very bottom of the sherd may mean that it is really a Ridged Vessel. A heavy rim that has been attached to the top of this vessel (see join in photo bottom right) is flat and insloping, with a flat edge on the outside of the pot. Under this is the first bevel, which ends with a pinched ridge, and then a second bevel that is twice as wide is beneath this, also ending with a pinched ridge. False lugs act as ridge stops in this second ridge and the walls are very thick at 21 mm wide. The fabric of this pot is very gritty with a lot of large lithic inclusions and crushed gravel added to it. These appear mostly as angular/very angular dark gray and black lithic pieces that are 5-6 mm wide, but there are many that are smaller as well. A heavy slip has been applied to this to cover these inclusions and the pot is dark brown on its surfaces and black in the core. The decoration consists of horizontal rows of birdbone impressions on the rim and rim edge. In the first bevel, diagonal slashes followed by a row of birdbone impressions reach the ridge and below, in the second bevel, a second row of birdbone impressions marks the other side of the ridge. Slashes were observed around the false lug in the second bevel and a third horizontal row of birdbone impressions borders the second ridge. Less than 5% of the pot has survived in this case and so no measurements of the pot's dimensions could be determined. In addition, there is a darkening on the outer part of the rim and manganate was noted on the surfaces.

68. Amble Quarry, Northumberland



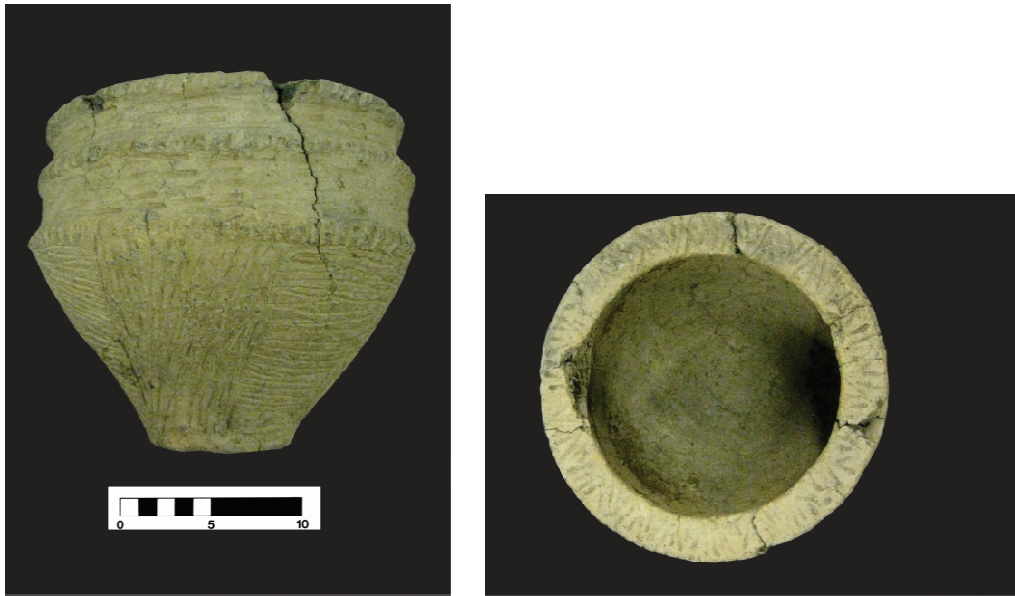
The Food Vessel from Amble Quarry, 1923.2/2, is a finely-made pot with an insloping rim and two external bevels to the shoulder. The second of these has three perforated lugs as stop ridges. The walls below this then narrow after the shoulder ridge to a wide, flat base. Inside, the transition is gradual to a rounded/flat base. The walls of this pot are 10.2 mm thick and the fabric is gritty with dark gray, subangular pieces, 3-4 mm wide. A substantial slip on both sides is brown with pink patches outside and dark gray near the bottom inside. The entire pot is decorated with whipped cord. Herringbone has been impressed on the rim and over the entire exterior of the pot, and vertical lines of whipped cord are on the ridge stops. About 99 % of the pot remains, with erosion affecting some parts of the rim and base, and it is 10 cm tall, 115 mm wide at the rim and 73 mm in diameter at the base.

69. Ashington, Northumberland



The Food Vessel from Ashington is not marked in the GNM with an acquisition number, but it is on display in the museum alongside a Beaker (described in the Beaker section) that is provenanced to the same site, which is listed as 1894.6. This pot is a heavy bipartite pot with a flat rim top and external rim bevel. The shoulder is carinated and then the walls narrow in a stout vase-shaped profile to a pedestalled, concave base. Inside, the transition is gradual/abrupt to a slightly convex base. Seed impressions were noted on the external wall. Interestingly, there is a texture on the inner walls like the impression of grass; the use of dung is a known material to aide in the firing process. The dung from herding animals, like cattle, which is rich in vegetation remains, can be caked on the surfaces of the vessel to create a greater temperature as it burns off, or it can be used as a temper to burn out during firing. Either way, this results in a better-fired pot, but also in a surface texture like the one inside this pot. The fabric of this pot is sandy and extremely gritty comprising dark gray, angular lithics, 5 mm wide, crushed gray lithics, 2-3 mm wide, and sand. A slip has been placed on top of this and the surfaces are light brown and the core is dark gray. The pot is decorated with a grooved zigzag on the rim and grooved herringbone in the bevel just below. On the body, vertical panels of alternating vertical and horizontal whipped cord are impressed into the clay. The entire pot remains and it is 11.1 cm tall, 142 mm wide at the rim and 72 mm in diameter at the base.

70. Harehaugh, Northumberland



This pot is listed in the GNM as 1946.25.1. This tripartite vase has a very slightly bevelled rim top that is flat and it has a very small flattened area at the rim edge. Below this on the outside of the pot are two vertical bevels with ridges in between and the shoulder is well-carinated. The walls below this, which are 13.5 mm wide, narrow gently to a pedestalled, concave base. Inside, the transition is gradual with a flat base. The fabric of this pot is very gritty with angular, dark gray lithics, 3-5 mm wide, and some light gray lithics. The surfaces have been wiped and the pot is light brown on the outside, dark brown inside and black in the core. The pot is decorated on the rim with a double zigzag of whipped cord impressions and short horizontal rows of cord on the rim edge. Short, horizontal impressions of whipped cord fill both bevels and this is opposed by the short, vertical impressions of whipped cord on the ridges. Under this are alternating panels of horizontal and vertical slashes, which extend to the base. Just about all of this pot remains, although there are some places where it has cracked or chipped. It is 13.8 cm tall, 149 mm in diameter at the rim and 58 mm wide at the base.

71. Villa Real, Jesmond, Tyne & Wear



This vessel, 1828.5, is a very round Hiberno-Scottish bowl. The rim is internally-bevelled and slopes inward and on the outside, there is a slight bevel at the neck before the walls bend into a rounded body and globular form. The base is flat on the outside and the transition abrupt to a convex base internally. The walls of this pot are 10 mm wide and the fabric is gritty with angular, dark gray lithic inclusions, 4-6 mm wide. The pot is slipped and the walls are brown with blackening towards the rim inside. The decoration on this pot is really quite unique and skilfully done. There are six horizontal grooves on the rim top and just inside the rim, divided by short, diagonal grooves (photo 3). In the neck bevel outside the rim, short diagonal whipped cord impressions encircle the rim, followed by four horizontal grooves. The rest of the pot is divided into horizontal panels, each separated by four horizontal grooves. The first and second, at the shoulder, have rows of vertical whipped cord impressions. The third, at the belly, has triangular impressions that have been used to create the false relief of diamonds (photo 4). This is repeated in the fourth panel and then the fifth, at the base, is a grooved zigzag pattern that results in infilled triangles. About 95% of the

Villa Real pot remains and there is a very heavy calcium deposit on the outside and rim. It is approximately 14 cm tall, 148 mm wide at the rim and 80 mm wide at the base.

72. Broomhill, High Mickley, Northumberland



The Food Vessel from High Mickley is a tripartite bowl, listed in the GNM as 1978.3. It has an internally bevelled rim and a short, flattened rim edge. The neck has three shallow bevels with slight ridges to the shoulder and the lower half narrows to a flattened bottom. The walls are 13.5 mm wide and the fabric is extremely gritty with very angular, dark gray lithics, up to 5.5 mm wide, having been added to the clay. The exterior of this vessel is yellowish brown with reddish splotches and inside it is light yellow with gray towards the base. The core is black from a fast, hot firing. The pot is decorated on the rim bevel with three rows of loosely-twisted cord. One further row of this is on the rim edge and in the first bevel are two rows of stab-and-drag impressions in a herringbone pattern. The first ridge is impressed with three horizontal rows of twisted cord and below this in the second bevel are diagonal slashes. The second ridge and third bevel repeat this, but the slashes are diagonally placed in the opposing direction. The third ridge also has three rows of twisted cord, impressed horizontally, and below this is herringbone in stab-and-drag. Two final rows of horizontal twisted cord make way for stab-and-drag herringbone to the base. About 65 % of this pot remains and it is 15 cm tall, 175 mm wide at the rim and 80 mm wide at the base. Where it has survived, the sherds are well-preserved, and this is probably due to uneven firing. Manganate was noted on all surfaces so the decomposition of the missing parts of the pot must have been fairly quick after deposition.

74. Huntlaw, Northumberland



1927.2a

The vessel from Huntlaw, which is only recorded in the GNM as having been acquired in 1927, is a bipartite Food Vessel vase. It is a crudely-made, heavy pot with a simple rim that has a wide neck bevel and carinated shoulder. The walls under this then narrow very gently to a concave, pedestalled base. Inside, the transition is gradual/abrupt to an eroded base. The walls of this vessel are 10 mm thick and the fabric is gritty with dark gray, angular lithic inclusions, 5-6 mm wide. The walls are yellowish brown and the core is dark gray. This pot is decorated only with right-handed fingernail impressions that are set in vertical rows. Three V-shapes in a diagonal line form a herringbone pattern on one side at the shoulder and the decoration on this pot almost looks experimental as it is uneven and inconsistent. The entire pot survives and it is 16.4 cm tall, 155 mm wide at the mouth and 96 mm in diameter at the base.

75. Colwell, Northumberland



The Food Vessel from Colwell is listed in the GNM as 1856.27. It is a waisted Food Vessel bowl. This pot has a flat, insloping rim with a large neck bevel and then a smaller waist bevel that is divided by two opposing perforated lugs that act as ridge stops. The lower half of the vessel then narrows gently to a slightly pedestalled, flat base. Inside, the transition is gradual to a rounded base. The walls of this pot are 9 mm thick and the fabric is extremely gritty with dark gray lithic inclusions, 2-5 mm wide. A heavy slip, now cracked, covers these and is yellow/brown on the outside, dark gray internally, and the core is dark brown. The pot is decorated on the neck bevel in two panels: horizontal grooved lines are just under the rim and halfway down the neck bevel, and there is a whipped cord zigzag, followed by a grooved zigzag in the upper half and a single whipped cord zigzag in the lower half. In the shoulder bevel, a whipped cord zigzag with diagonal grooves to the right fill the space, and on the body, horizontal grooves border a pattern of whipped cord and grooved zigzags at both the shoulder and base. Erosion has cost the pot about 5 % of its original form and so only about 95 % of it remains. It is 10 cm tall, 140 mm in diameter at the rim and 65 mm wide at the base.

76. The Fawns, Kirkwhelpingham, Northumberland



1879, 1209.1461

The Food Vessel found in Canon Greenwell's Barrow 210 is catalogued in the British Museum as 1461. This vessel is not well preserved, but two bevels under the rim on the outside and narrowing walls to a flat, pedestalled base were noted. This Tripartite Vase then has a gradual/abrupt transition to a flat base. The walls of 1461 are 12 mm thick and the fabric is very corky, which demonstrates that a lot of organics were used as temper for this pot and burned out during firing. Some lithic inclusions were also noted; they are subangular,

dark gray pieces, 4-5 mm that appear natural. The walls of this pot are dark brown with a reddish undertone and the core is dark brown. It is decorated with short, vertical lines of tightly twisted cord in a row in the upper bevel under the rim. Only about 45 % of this pot remains, but an estimated rim diameter of 150 mm was obtained and 65 mm diameter at the base was measured.

Newton, Corbridge, Northumberland



Bottom two photos of 1813.14 display the changing decoration around the pot (left) and a deep seed impression in the wall (right).

Two Food Vessels were found at Newton in Corbridge. The larger is a ridged vase whilst the second, and smaller pot, is a Yorkshire vase.

The Ridged Vase from Newton is a medium-sized pot with a flat rim that bends inward with a larger external bevel under the rim and a further two bevels on the shoulder with ridges in between to the shoulder. The vessel has shallower bevels with ridges to the very concave base. Inside, the transition is gradual to a rounded bottom. A deep seed impression was noted on the ridge of the shoulder (above photo 5). The wall of this pot is 10 mm wide and the fabric looks gritty, but a heavy slip obscures the fabric on all sides. Angular, gray lithics, 4-5 mm wide, were noted through the slip. The outside of the pot is light brown with a reddish hue and inside the surface is darker red to dark brown. This pot is decorated entirely in two

types of comb: a square-toothed with 1 mm wide teeth and rectangular-toothed with 2 mm wide teeth. On the rim, a herringbone pattern is impressed with the square-toothed comb and on the rim edge, three horizontal rows in rectangular-toothed comb are impressed. In the upper bevel, herringbone in square-toothed comb overlies three horizontal lines in rectangular-toothed comb. This is repeated to the shoulder. The panel just below the shoulder has diagonal lines in one direction on one half of the vessel and diagonal lines in the opposite direction on the other side. Herringbone is then impressed to the base. On the base, a cross pattern, made of three lines of cord, are impressed and diagonal lines encircle this around the edge of the base. About 99 % of the pot remains and it is 15 cm tall, 130 mm wide at the rim and 50 mm wide at the base.



Above photos: The Yorkshire Vase from Newton is decorated on the entire exterior (top left), rim top (top middle) and base (top right). A close-up photo (bottom left) shows this. Perforated lugs ornament the shoulder bevel (bottom middle) and a deep seed impression is on the side (bottom right).

The smaller vessel has a flat rim that bends hangs over the inside and has a flat edge and a wide neck bevel. The shoulder is bevelled as well with moulded, perforated lugs at four points around the vessel, creating ridge stops. The lower walls, 9 mm wide, bend quickly inward down to a concave base. Inside, the base is rounded with a gradual transition. A heavy slip obscures the fabric interior, but a large seed impression was visible on the pot wall.

White lithic material, 1-2 mm wide, was also noted. This pot is light brown on the inside and out and there is a blackened patch on the rim. The pot is ornately decorated on all sides. Triangular impressions opposing one another create the false relief of a zigzag on the rim and this is bordered by very fine twisted cord lines. On the outside, the same false relief of zigzag is alternated with horizontal rows of twisted cord to the base. This goes over the false lugs, but the shoulder bevel is undecorated. Near the base, three horizontal rows of square-toothed comb are impressed. On the base, a cross shape is impressed with three rows of cord. This pot survives entirely and it is 7 cm tall, 85 mm wide at the rim and 30 mm wide at the base.

Broomridge, Northumberland



1879, 1209.1400



1879, 1209.1406q

From Barrow 188 at Broomridge, Canon Greenwell uncovered the remains of two pots, which have been assumed to be Food Vessel. The first, 1400, consists of two sherds from a thick, heavy vessel that has a heavy slip. The walls are 16 mm (very thick) and the fabric is, predictably, extremely gritty with very large, angular, dark brown and black lithic inclusions that measure 9-10 mm wide and up to 16 mm. The sherds are brown with a red hue on the exterior surface and black inside and dark gray in the core. The decoration consists only of horizontal rows of heavy twisted cord (3.5 mm strand) in which some converge, suggesting a pattern of parallel horizontal lines with narrow triangles. These sherds represent less than 1 % of the original pot and they are very friable.

The second pot is represented only by a fragment from the base of a coarse vessel that has a gradual transition and a pedestalled base. The fabric is also very gritty with many large, angular, dark gray lithic inclusions that measure, on average, 5 mm wide. There is no decoration on this sherd, which is not atypical for Food Vessel or Collared Urn, and it is brick

red with brown on the outside, dark brown inside and in the core. This sherd is less than 1 % of the original pot and it too is friable.

Bewick Moor, Old Bewick, Northumberland



1879, 1209.1751

In a round cairn on Bewick Moor, Canon Greenwell found this rim sherd, which is from a Food Vessel with a flat, insloping rim and at least one external bevel. It is a particularly coarse pot, as the walls are 18.5 mm wide, and the fabric is gritty with flakes of lithic material within. These include very angular, dark gray lithics, 5-7 mm wide and smaller, and possibly, grog. The pot has dark brown surfaces and a black, sooty core and it is decorated with incised herringbone on the rim top and rim edge. Diagonal slashes on the wall under the rim also form a zigzag pattern. This sherd represents about 1 % of the original vessel and it is very much eroded at its edges.

Kirkpark, Musselburgh, Midlothian



NMS X.EA 147

This urn greatly resembles those found at Sheriffflats, Thankerton, Lanarkshire. NMS X.EA 147 was found in a large, multi-phase cemetery. It has less of a Ridged Food Vessel form than the NMS X.EA 29 and NMS X.EA 30, from Sheriffflats, as the bevels are very slight, but like those, the decoration is modest and only near the rim. NMS X.EA 147 has a flat rim top with an internal bevel. The pot is conical in shape with two very slight bevels – one under the rim and the other near the shoulder (which is carinated). The base is reconstructed so it cannot be accounted for here. The walls of this pot are 10 mm wide and the fabric is only slightly gritty with dark gray lithic material, 2-5 mm wide. There is a slip on the outside and both surfaces are brown and there is a light gray core. On the collar, whipped cord has been used to create a zigzag pattern and this is bordered at the top and bottom with further horizontal lines of cord. A cordon at the bottom of this closes this panel. A further two ridges are created using cordons below this with bevels in between. This pot is mostly reconstructed and only about 30% of the original pot remains (albeit allowing for the profile to be discerned), but a rim diameter of 145 mm was visible.

APPENDIX 7: VASE URNS*

1. Birsley, Tranent, East Lothian



The Vase Urn (Enlarged Food Vessel) from Birsley, NMS X.EA 6, has a flat, insloping rim with a T-shaped profile that is flat on the outside of the rim. Below this are two large bevels, divided by ridges formed using cordons. The pot then narrows gently to a lop-sided flat base with a rounded profile. The base has been reconstructed so the transition could not be observed. The fabric of this pot is very gritty with many deliberately added lithic inclusions. These are very angular and gray, 6-7 mm across, and grog was also seen in the clay matrix. NMS X.EA 6 is brown on the external surface with red patches and the inside surface and core are gray. It is decorated with four rows of twisted cord inside and on the rim. The bevels are filled with zigzags of cord maggots and each cordon ridge has a further row of these set diagonally. Under the second cordon a single row of twisted cord is impressed. Although the pot is largely reconstructed, about half of it is original and it stands 33 cm tall. The rim diameter is 310 mm, but the base is missing and so could not be measured.

*The numbering in this appendix correlates to the site numbers in Map 6.5

2. Lintlaw, Bunkle & Preston, Berwickshire



Found inverted over the cremated remains of an individual, NMS X.EA 203 is a vase urn with an insloping rim on the inside. The neck of the vessel on the outside is concave with false lugs forming ridge stops within the bevel. A second bevel is below this before a carinated shoulder. The walls (10.7 mm thick) narrow in a vase shaped profile to the missing base. The fabric is gritty with many lithic inclusions and are angular to very angular, dark gray and mostly 4-5 mm, although some are up to 10 mm. Black flecks in the core of the pot suggest burnt out organic inclusions as well and there is a content of sand too. Both sides of the pot are slipped and reddish brown in colour and the core is dark gray. Blackening was observed under the rim and on one side of the pot. NMS X.EA 203 is decorated on the rim with four horizontal lines of twisted cord that are interspersed with opposing whipped cord maggots that creates a herringbone pattern. On the rim edge on the outside, vertical lines of whipped cord surround the edge. The first collar bevel is decorated with diagonal slashes, interspersed with false lugs that act as ridge stops. The second bevel has diagonal slashes in the opposite direction and a row of deep rectangular, vertical grooves are on the shoulder carination. About half of the pot remains and so the height and base diameter are unknown, but a rim diameter was determined to be 330 mm. A black deposit, possibly a heavy deposit of manganate was noted on the rim bevel.

3. Howlet's Ha', Westruther, Berwickshire



Listed as a cinerary urn in the note of acquisition in 1921, this pot, NMS X.EA 183, is, more specifically, a bipartite Vase Urn. NMS X.EA 183 is a vase-shaped vessel with an internally-bevelled rim that slopes downwards inside. On the outside, the pot narrows to form a smooth neck and then bends out to a bevelled shoulder. The lower half of the pot narrows quickly to a (presumed) flat base. The thick walls (15-25 mm) of NMS X.EA 183 are made of a very gritty fabric with very angular inclusions of lithic material in dark gray, white and red (mostly 4-6 mm, but some up to 9 mm) appear to have been prepared from natural gravel. A quantity of sand is also present. A heavy slip with striations from wiping is pinkish yellow on all surfaces and the core is black. The top of the rim is also blackened.

NMS X.EA 183 is decorated on its rim bevel with a very fine twisted cord in horizontal rows with a zigzag pattern then placed over top. Incised herringbone in horizontal rows from the rim to the bottom 1/3 of the pot stops only for the narrow bevel at the shoulder, which is undecorated, but bordered at the top and bottom by vertically incised lines. Just over half of the pot remains to this day, so the dimensions of it are uncertain; however, 28 cm of the pot from base to shoulder remain. Manganate was noted on some of the sherds.

4. Hoprig, Cockburnspath, Berwickshire



The information kept with this Vase Urn from Hoprig at the NMS explains that it was found inverted over the cremation of an individual in a pit, surrounded by stones; however, the report (Hardy 1887-9) mentions only a Collared Urn that was destroyed and two Beakers. It also says, though, that this area is known for urn finds, which is what incited the excavation in the first place, and so it may be that this was found at another time in the 19th century. Clearly, the site we are dealing with here is a multi-phase cemetery that existed from the time of Beakers to that of Collared Urns. This pot, NMS X.EQ 595, is clearly a Bipartite Vase Urn with clear stylistic connections to those known at other local sites, like Goatscrag in Northumberland.

NMS X.EQ 595 has two small bevels just under the rim, created by the application of three cordons. False lugs, which act as stop ridges are applied over these two bevels reaching from the top cordon to the bottom one, stick out from the vessel. The neck is formed by a third, larger bevel that is straight and this ends by another two cordons at the shoulder that create a fourth bevel with applied lugs. This second set of stop ridges also stick out, but not quite to the extent of those on the rim. The walls of this pot then abruptly narrow to a very pedestalled (2.5 cm tall), flat base. Inside, the transition is abrupt to a flat base. The fabric of this pot is fairly gritty, but it is sandy to the touch. Angular, dark gray and white lithic material was observed, but a heavy slip made it difficult to determine the fabric accurately or measure the inclusions. The surfaces of this pot are dark brown with a red undertone and a blackened patch was observed on one side of the pot inside. NMS X.EQ 595 is ornamented with short, vertical, whipped cord maggots on the cordons that create the upper ridges under the rim.

Horizontal maggots of the same cord were then placed in a row on each ridge stop. The neck bevel is impressed with panels of horizontal and vertical whipped cord lines and this is completed with a bottom border of vertical maggots on the cordon below. On the lower half of the pot, below the shoulder, lozenge shaped, impressions are set vertically in the surface of the pot. A row of these then surround the pedestal. NMS X.EQ 595 is 43 cm tall, it has an oval rim that is 370 mm x 350 mm wide and a round base that is 124 mm.

5. Berwickshire ?

Four vessels in the NMS are antiquarian finds and have no known provenance other than the county in which they were found. They are still of use to this project since it is an overview of all pots found in the entire Tyne-Forth region and the county, at least, can be attributed. They are listed as EA 182, EA 184, EA 185, and EA 186. EA 182 and EA 185 are Vase Urns and EA 184 and EA 186 are Collared Urns.



EA 182



NMS X.EA 182: Three images of the decorative motifs and patterns used. Note the ‘loopy’ pattern in the bottom photo – this is the only example seen in the study area.

NMS X.EA 182 is an Enlarged Food Vessel. It has a flat rim with a straight, but slightly concave, neck that ends with a bevelled shoulder that is emphasised with cordons for the ridges. False lugs acting as ridge stops ornament this bevel. The walls, 16 mm thick, then bend gently inward towards the missing base, creating a rounded vase profile. The fabric is gritty with many black, angular lithic inclusions, mostly uniform in size at 5-7 mm, but some are larger and up to 12 mm. A heavy slip has been put on both sides and the exterior is yellowish brown with red patches near the rim and the interior is brownish black. The core is also black. The collar is divided into five sections by ridge stops and each of these is decorated with different patterns using what appears to be the same twisted cord. The first two sections consist of two rectangular boxes, one inside the other, with the smaller filled in with three horizontal lines of cord. The third section is filled with lattice, whilst the fourth section is filled with looped horizontal lines that taper off at one end. The final section has four vertical lines and vertical looped lines. In the shoulder bevel, five ridge stops create six sections, each infilled with a zigzag pattern. Since the base is missing, it is estimated that about 90% of the original pot is represented. From this, only the rim diameter could be measured, which is 320 mm. A deposit of calcium was also noted inside the pot.



NMS X.EA 185

NMS X.EA 185 is an Encrusted Urn, a form of Food Vessel Vase urn with applied decoration. It remains only as a rim sherd from a very large urn with a flat, insloping rim and straight neck. The walls below the neck are 15 mm wide and the fabric is extremely gritty with very angular, black lithic material. These are mostly 5-6 mm wide, but some are smaller and others larger. A heavy slip was put on top of this to cover the fabric and it was wiped well. The external side of the pot is reddish brown and the inside is dark brown whilst the core is dark gray. Incised herringbone ornaments the rim and on the outside, applied cordons have been placed in a zigzag pattern. Two further cordons were applied in horizontal lines below this and herringbone was incised faintly into them. As this is only a rim sherd, it represents only about 10% of the original pot, but a rim diameter of 250 mm was obtained.

6. Kylepark, Uddingston, Lanarkshire



NMS X.EA 108



NMS X.EA109

Three 'urns' are reported from this site, but only two were useful for analysis since the third was too fragmentary. NMS X.EA 108 has a double bevel inside the rim and a flat edge on the outside of the rim. Underneath the rim on the outside is a small bevel and ridge, followed by a larger bevel and a carinated shoulder. The walls then narrow quickly to a concave base. The fabric is gritty, but obscured by a heavy slip that was fired brick red on the outside. Large, angular, light gray lithic material, about 8-10 mm was noted, however. The two rim bevels inside the rim are decorated with rows of stabmarks and plaited cord impressions are in the first external bevel. In the larger bevel on the collar, a cord placed in a zigzag pattern that is bordered on top and bottom by plaited cord impressions encircles the pot. Each triangle formed by this zigzag has a lug in its centre and the entire design is bordered at the top and bottom with plaited cord. About 90% of this pot remains, although the inside is heavily restored. Its height measures 37 cm and it is 300 mm at the rim and 110 mm at the base.

The second pot, NMS X.EA 109, has an internal rim bevel and thickened rim. The collar is bevelled also and then widens to a sharply carinated shoulder, then narrows to a flat(?) base. The fabric of NMS X.EA 109 is similarly gritty with angular, light gray and white lithic inclusions, 2-6 mm and smaller. A heavy slip on the outside has been burnished to a dull sheen and the pot is pinkish red with yellow patches on the outside and brown with blackening near the rim on the inside. In the rim bevel, the pot is decorated with two rows of plaited cord in opposing directions, creating a vine pattern. On the collar a zigzag of plaited cord fills the neck bevel and this is bordered by a horizontal row of the same plaited cord above and below. A further horizontal row of plaited cord is placed just below the shoulder carination. Most of this pot survives, although the base has been reconstructed, and its height was estimated at 31 cm and the rim diameter was measured, producing a 245 mm result.

8. Tappitknowe, Hamildean Farm, Peeblesshire



7121

The vessel from Hamildean Farm is the only Bronze Age pot from the Tweeddale Museum as the many others found in Peeblesshire are now housed in the National Museum of Scotland in Edinburgh. It is catalogued as 7121 and is a Bipartite Vase Urn with an internally bevelled insloping rim that has a rounded rim edge and a wide, concave neck that bends out to a carination at the shoulder. The walls then narrow gently towards a slightly pedestalled, flat base. The transition inside is gradual to a rounded base. The fabric of this pot is very gritty with angular, dark gray lithic material that is 4-6 mm wide and up to 10 mm wide. Natural gravel was also observed that was 1-2 mm. A moderate slip was set over this and the upper 2/3 of the vessel was then decorated with horizontal rows of finely-twisted cord (with a 1.5 mm wide strand). The rim top is also ornamented in this way. The surfaces of 7121 are yellowish/brown and there is a blackening towards the base on the inside (photo 2). The core is dark gray and the vessel is 25 cm tall, 210 mm wide at the rim and 91 mm wide at the base. The walls are 16.5 mm thick. The survival of this pot is good, as 99 % of it remains, and only a few inclusions have fallen out. However, there is a light deposit of manganate inside the rim.

11. Goatscrag, Northumberland



1969.19



1969.20

Two Enlarged Food Vessel Vases and a Food Vessel urn are recorded in the report for Goatscrag, Northumberland, of which the Enlarged Food Vessels were available for study. The first, listed as 1969.19 in the GNM, has a steeply insloping rim with a rounded edge on the inside of the pot and a double bevel with a very slight ridge in between on the collar. Ridge stops divide the second bevel, but these are so well-smoothed that they seem to form almost natural contours to the pot, rather than looking like applied cordons or lugs. The lower portion of the pot is missing and was reconstructed, but the remaining walls suggest a vase-shaped profile. The fabric of this pot is extremely gritty with angular, dark gray lithic pieces up to 10 mm across. A heavy slip was applied over this and the pot is fired to a medium brown on the outside, dark brown inside and the core is black. The decoration inside the rim consists of horizontal rows of thick twisted cord (4.5 mm wide strand) with a row of diagonal impressions of cord on the rim edge. In the first bevel, semi-circles of cord in elongated rectangular shapes are impressed in panels that match those created by the ridge stops in the bevel below. In the second bevel, between the ridge stops, herringbone patterns fill the rectangles and are bordered by a double row of cord. Below the shoulder are diagonal slashes. Half of 1969.19 remains, the lower half having been reconstructed, and the rim diameter is 340 mm.

The second Enlarged Food Vessel, 1969.20, has an insloping, bevelled rim with a flat external edge. A double bevel to the shoulder has a raised ridge in between and prominent ridge stops separate each bevel into panels. The lower part of the vessel has walls that bend in towards a pedestalled base. Inside, the transition is abrupt to a flat base. Like 1969.19, the fabric is extremely gritty comprising angular, dark gray lithic inclusions up to 10 mm wide. A

heavy slip covers these and the pot is medium brown throughout with a blackened patch near the rim on one side. Inside the rim, whipped cord has been impressed in a herringbone pattern and diagonal lines of this has also been placed on the external rim edge. Short vertical lines of whipped cord extend through both bevels and below the second bevel at the shoulder, whilst horizontal lines of whipped cord contrast this on the upper ridge stops and diagonal lines of whipped cord are on the lower ones. The entire pot has survived and it is 38 cm tall, 330 mm at the rim and 120 mm at the base.

12. Roseborough I, Bamburgh, Northumberland



1879, 1209.1426

The Enlarged Food Vessel from Roseborough is a bipartite vessel with beautifully-crafted ornamentation. It has an internally-bevelled rim that slopes inward and emphasized rim edge that has been moulded in a scalloped shape. The neck bevel ends in a second scalloped ridge like this and then the walls, which are thick at 16 mm, narrow in a vase-shaped profile to a flat base. Inside, the transition is abrupt to a flat base. Heavy scraping to thin the walls was noted on the upper 1/3 of the vessel inside. The fabric of this pot is extremely gritty with dark

gray, angular lithic material that measures, on average, 3-4 mm, but some pieces are up to 9 mm. The pot has a heavy slip and it is brown with red patches on the outside, brown with a yellow hue on the inside and dark gray in the core. Two rows of incised herringbone ornament the rim top and these are divided by a horizontal line (photo 2). A row of circular impressions underlies this, which appear to have been made by a reed or hollow bone. This herringbone continues on the rim edge and it is moulded with lugs to create a scalloped bottom. In the neck bevel there are panels whereby incised vertical zigzags make way to herringbone. This ends with a second ridge that has been moulded with lugs to form a scalloped edge. On both ridges, vertical incisions cover the lugs. On the body of this vessel is a zigzag reaching from shoulder to base, which forms triangles: the inverted triangles are then filled with vertical slashes and the upright triangles are filled with horizontal slashes. All the decoration on this pot has been done lightly so that the effect is rather light and feathery. Mangante was noted on the surfaces of this pot and a black encrustation is in the neck bevel. Although it is reconstructed, about 70 % of the original pot remains and it is 38 cm tall, 318 mm wide at the rim and 103 mm in diameter at the base.

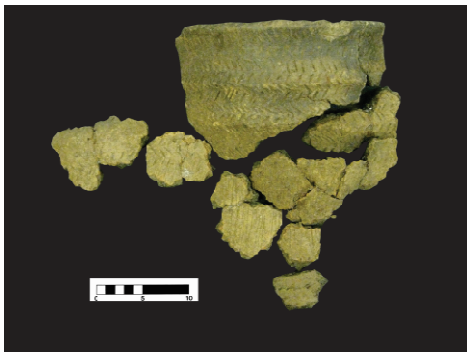
14. High Buston, Northumberland

The remains of three Vase Urns were uncovered from High Buston, as well as a Beaker (described in the Beaker section), which are all listed under the acquisition number of 1981.16 in the GNM. Since they did not have individual numbers, they were randomly given numbers here and were correlated to the site reports after the fact, which is why there is some discrepancy. Two of the Food Vessels are described here, but the third was not found in the box with the other pots mentioned in the text. It is, therefore, listed as unavailable for study.



1

The first of these is listed as pot # 3 both in Jobey's (1957) report, but #1 in this thesis. It remains as a large rim sherd from a Ridged Vase Urn. It has a slightly bevelled inner rim that slopes downward and a pointed rim top and flat rim exterior. On the outside, there is immediately a bevel and this is then followed by at least two more bevels, all separated by ridges. Each of these has vertical false lugs that act as ridge stops. The walls of this vessel are 15.1 mm thick and the fabric is gritty with black and white lithic material that is 3-4 mm wide. Calcite was also noted in this fabric. This pot is dark brown with grey overtop and it is lighter brown inside. Inside the rim are three rows of plaited cord and on the rim edge are short, diagonal impressions. Just under the rim, V-shaped birdbone impressions have been set in a horizontal row, followed by two rows of plaited cord in the first bevel. These appear to go under the ridge stop as it is individually decorated with a vertical row of birdbone impression. A further seven rows of short diagonal twisted cord impressions with a fingernail impression placed over one end of the cord (photo right) ornaments to the bottom of the third bevel. This is followed by a single row of short, diagonal cord impressions. This sherd probably represents about 10% of the original vessel.



3

The pot that Jobey (1957) lists as # 2 was listed as #3 in the catalogue here. It is an almost complete rim sherd with several body sherds and a base sherd. The rim slopes down slightly inside, but is moulded on the outside and has a flat edge. Below this are two wide, but shallow, bevels with ridges in between and the shoulder is ridged and carinated. The lower walls are 13.5 mm wide and bend sharply inward to form a vase-shaped profile to the pot, narrowing to a flat base with a slight pedestal. These include angular lithic pieces 2-3 mm wide and calcite, 1.5 mm wide. Mica was also noted, which may be natural from the inclusions if the lithic was granite. The inclusions erupt from the surface and there is a very grainy texture to the inner surface of the pot. The pot colour varies over its surface from dark

gray to dark brown and the inside is light brown. The core is black. The pot is decorated inside the rim with grooved zigzag, which extends to the top of the rim and its edge. The zigzag pattern then continues for the next 2/3 of the pot with longer grooves. Below this are light diagonal slashes, set randomly, to the base. Two rows of birdbone impressions are then set at the very bottom of the pot. The sherds together form about 15-20% of the original pot, but only a rim diameter of 220 mm could be discerned.

15. Ryton-on-Tyne, Tyne & Wear



The Vase Urn from Ryton-on-Tyne is catalogued in the GNM as 1929.17. It has a flat rim that slopes inward inside and a wide bevelled collar outside that ends in an emphasised, carinated shoulder. The pot narrows under this in a vase-shaped profile to a concave base. The walls are thick, about 18 mm, and the fabric is very gritty with dark gray, very angular inclusions, 4-6 mm across, black lithics and grog. Blackened areas in the fabric suggest that organic inclusions were also present. The external side of 1929.17 is light yellowish brown with red at the bottom. Inside, the surface is darker brown and the core is brown and gray. Inside the rim is decorated with a row of diagonal slashes under a row of stabmarks. On the rim, two rows of stab-and-drag marks in opposing directions with a row of birdbone impressions in between is impressed. Stab-and-drag marks in a herringbone pattern is then placed on the rim outside. In the neck bevel, a zigzag of applied cordon that is cut with horizontal stab-and-drag marks encircles the pot and a horizontal row of vertical stab-and-drag marks divides each of the triangles of the zigzag in half. The shoulder is decorated with seven horizontal grooves and below this are three rows of vertically incised stab-and-drag marks, each separated by a horizontal row of stabmarks. Finally two rows of zigzags are grooved under this. This pot is 34 cm tall and the rim is 300 mm wide. The base is 105 mm

wide. About $\frac{3}{4}$ of the original pot survives and the only major flaw is a large crack down one side of the vessel.

Roxburghshire?

Many small sherds and fragments make up the remains of a Vase Urn of unknown provenance from Roxburghshire. It appears to have the typical form of an insloping, flat rim with two external neck bevels and a narrowing form to the base. The walls are 10-13 mm thick and the fabric is clay-rich with angular, dark gray lithics that are 7-11 mm wide. A very heavy slip covers this and the walls are dark brown on the outside, black inside and in the core. The vessel is decorated in the first bevel with converging diagonal lines of twisted cord that form opposing triangles that are infilled with diagonal lines. In the second bevel is a row of herringbone. No measurements could be taken as the fragments were all too small to yield any, and it is estimated that they represent only about 30% of the original vessel.

Ancrum Moor, Roxburghshire



NMS X.EA 237

The vessel from Ancrum Moor is a Vase Urn – probably a Bipartite Vase, although it may have been a Tripartite Vase. It has a flat rim top and external edge and then the straight neck belies this. A fluid movement out to the shoulder carination then changes direction to the lower vase-shaped portion of the vessel and down to a pedestalled, flat base. Inside, the transition is gradual/abrupt to a flat base. The walls of this pot are thick at 14 mm and the fabric is typically extremely gritty comprising angular, dark gray and light gray lithic pieces

that are 4-6 mm wide. Quartz was also observed. A very heavy slip was then put on the outside of the vessel and it was fired to an orange/red on the outside, brown on the inside and black in the core. The base diameter is 118 mm and the rim diameter was estimated to be 260 mm. The decoration on NMS X.EA 237 begins with moulded 'ribs' just inside the rim (possibly a remainder of the vessel construction) and short, vertical whipped cord lines on the rim top and rim edge (photo 2). Under the rim, a row of false lugs have been applied and beneath this, the neck has several horizontal lines that create more raised 'ribs' to the shoulder. The shoulder carination then has a row of fingernail impressions that have been set into the clay and then dragged upwards. On the lower half of the vessel there are three rows of lozenge-shaped fingertip impressions (photo 1). The remains of this vessel amount to about 70 % of the original pot and there are places that are eroded and inclusions have dropped out.

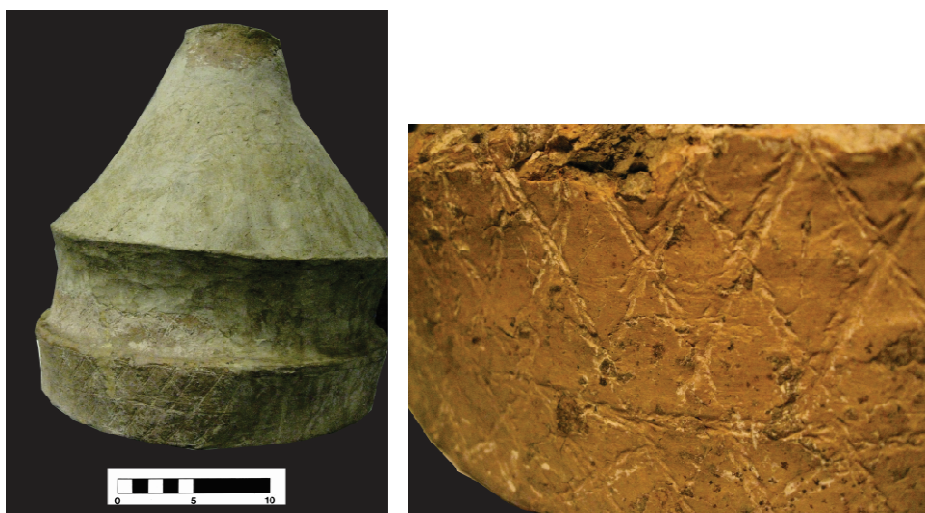
APPENDIX 8: COLLARED URNS*

1. East Links, Dunbar, East Lothian



A rim sherd that shows the pot's profile from the rim to the shoulder was found at East Links and is registered as NMS X.EA 247. It is very large and comes from a heavy pot with a well-formed collar, deeply concave cavetto and angular wall that bends out to a bevelled shoulder. The walls then appear to narrow quickly down to the base. Longworth (1984, 305) places this pot into the Primary Series, Form IB. It has very thick walls at 17 mm, and the fabric is accordingly extremely gritty with very angular, black lithic inclusions, 8-10 mm wide. A slip, especially heavy inside, has been applied to the pot to cover this and it is reddish brown on the outside, black and sooty inside and black in the core. The decoration is unique on this pot: horseshoe-shapes in heavy twisted cord (3 mm wide strand) are deeply impressed in rows on the collar, inside the rim and on the neck of the vessel. Only about 20% of the vessel has survived, but a rim diameter of 220 mm was discernable.

2. Meiklerigg, Stenton, East Lothian



*The numbering in this appendix correlates to the site numbers on Map 6.6

Lonworth (1984, 308) places the Collared Urn found in the Fairy Knowe mound at Meiklerigg Farm in his Secondary Series, Form IA category. It had been inverted over a cremation in a cist and rarely, had survived the plough, and was near a second cist containing a flint knife, a whetstone and a piece of skull. The pot is now catalogued as NMS X.EQ 68 in the NMS.

NMS X.EQ 68 has an internally-bevelled rim that slopes down on the inside of the pot and a vertical collar and bends outwards towards its bottom that overhangs the pot. The straight cavetto bends outwards at the carinated shoulder and then the walls of the pot, 16 mm thick, bend quickly inwards creating a concave profile to the wall that narrows down to a pedestalled flat base. Inside, the transition to the base is gradual and the base is rounded (although it is reconstructed and the transition only partially visible). The fabric is extremely gritty with angular dark gray lithic material (5-6 mm) and rounded dark gray lithic material (8-10 mm). A heavy slip, pinkish red on the outside with blackened patches (presumably from smoke clouds in the fire) and pinkish brown on the inside covers this fabric and the dark gray core.

The Meiklerigg pot is decorated with opposing diagonal lines of plaited cord on the upper collar, which creates diamond shapes that is divided in two equal parts by a horizontal line of the same cord. On the neck, opposing panels of horizontal and vertical lines of plaited cord reach to the shoulder. Only 40% of the pot remains and it is heavily reconstructed; however, measurements of 32 cm in height and 320 mm diameter at the rim and 80 mm diameter at the base could be discerned. A moderate deposit of manganese was noted on one side of the pot.

3. Longniddry, Bogglehill Wood, Gladsmuir, East Lothian



NMS X.EQ 504

Of the five cinerary urns and beaker reportedly found on the Longniddry golf course in 1925-7, two of the Collared Urns were available for analysis. Longworth (1984, 307) classifies NMS X.EQ 502 as Secondary Series, Form IA and NMS X.EQ 504 as Secondary Series, Form IV. Both were found in a low mound associated with cremated bone, although their position and relationship to the flint knife, flake and annular beads of blue vitreous paste is not stated. They are similar in form, size, technique and shape, which may suggest a relationship between their potters.

NMS X.EQ 502 is a tiny, lopsided pot with an insloping rim and slightly concave collar. The edge of the collar is slight and the walls beneath straight without a cavetto. At the shoulder the walls (11 mm wide) bend suddenly inwards and narrow quickly to a flat base. Inside, the transition is abrupt to a flat base. The fabric of this pot is less gritty than other urns with black rounded lithics, 4-6 mm and some up to 9 mm, and grog. The pot is slipped on all sides, but it does not totally cover the pot. The external side is light brown with patches of brick red, whilst inside, the pot is dark brown and the core is black. NMS X.EQ 502 is undecorated, but heavily scraped on the outside. It is 15 cm tall, has an oval mouth, 140 mm x 120 mm, and a round base, 70 mm wide. Nearly all of this pot remains, only 5% having been reconstructed, but erosion has affected parts of it, particularly on the inside.

NMS X.EQ 504 is similarly small with a well-defined, but finely made collar with straight sides and an out-turned edge. The rim is flat. Under the collar the walls (12 mm wide) are straight and at the uncarinated shoulder, they bend inward quickly down to a concave base.

The transition inside is gradual, but the base is eroded so its form is unknown. The fabric of NMS X.EQ 504 differs from NMS X.EQ 502 in that, although comprising roughly the same amount of lithic inclusions, this pot contains angular, prepared, dark gray lithics, 2-4 mm and up to 7 mm, and grog. The fabrics are similar enough to denote a local tradition or perhaps even contemporary fashioning, but they were not made of the same clay batch. A slip is visible on the outside, but it has eroded on the inside, both sides are brown and the core is dark gray. The only decoration on this pot are diagonal lines of twisted cord on the collar that form X shapes, bordered at the top and bottom with a horizontal line. NMS X.EQ 504 is 25 cm tall and the diameter at the rim is 246 mm and the base is 85 mm wide. About 80% of the pot remains, although it is eroded.

4. Quarryford Farm, East Lothian



NMS X.EA 56

The Collared Urn found at Quarryford was inverted over a cremation burial and is classified by Longworth (1984, 309) as Primary Series, North Western Style, Form IA. However, his description of the vessel does not correlate to this pot. NMS X.EA 56 has a simple, rounded rim with a sloping, rounded collar that bends outwards to hang over a straight, but inset cavetto. The shoulder is sharply carinated and the walls then bend sharply inwards to form a vase shaped profile down to a flat base. The fabric is extremely gritty with black and gray lithic inclusions, 5-6 mm wide. The pot is slipped, but it does not fully cover these. A grooved zigzag ornaments the collar with the subsequent triangles being infilled with opposing lines. The cavetto is crosshatched with opposing diagonal lines. Approximately 90% of the pot remains in-tact and the external side is orange, the internal side red and the core is gray. NMS X.EA 56 is 31.5 cm tall, 220 mm wide at the rim and 100 mm wide at the base.

7. Kirkpark, Musselburgh, Midlothian

Kirkpark is a large cemetery site and the report listed 17 vessels that were uncovered. Some of these have not survived and so only 14 were available for analysis. Three are accessory vessels (described in the accessory vessel section) and the other 11 are Cinerary Urns. They are listed in the NMS as: NMS X.EA 117a, NMS X.EA 117b, NMS X.EA 143, NMS X.EA 144, NMS X.EA 145, NMS X.EA 146, NMS X.EA 147, NMS X.EA 149, NMS X.EA 150, NMS X.EA 151 and NMS X.EA 241.



NMS X.EA 117a

This heavy vessel has a flat rim top and a straight collar that bends out near the bottom to form the collar edge. This hangs over a straight cavetto that ends in a carinated shoulder. The pot walls then narrow in a rounded, vase-shaped profile down to a flat base. Inside, the

transition is abrupt to a flat base. The fabric of NMS X.EA 117a is sandy in texture and the inclusions are angular and dark gray. They are 5-6 mm but there are many smaller, about 2-3 mm wide. NMS X.EA 117a has a reddish-brown slip on the outside, a brown surface with reddening on the inside and a brown/gray core. A black, sooty mark extends from the base inside the pot up one side of the vessel. A deep seed impression was also noted on the base (photo above). The decoration seems to have been done using two weights of cord, a finer one, 1.9-2.0 mm, and a thicker one, 2.5 mm wide. On the rim top, the finer twisted cord is impressed in short diagonal lines, whilst on the collar, the heavier cord is impressed in a zigzag, creating a triangle pattern. The triangles are then filled in with horizontal lines of the same cord. In the cavetto, this pattern is repeated, but with incised lines; however, it only extends around half of the vessel and on the other side there are just a few horizontal lines. About 95% of NMS X.EA 117a remains and it is 28 cm tall, 220 mm wide at the rim and 90 mm wide at the base. There is also a light deposit of manganate on the external surface. Longworth (1984, 307) lists this as Secondary Series, North Western Style, Form IA.



NMS X.EA 143

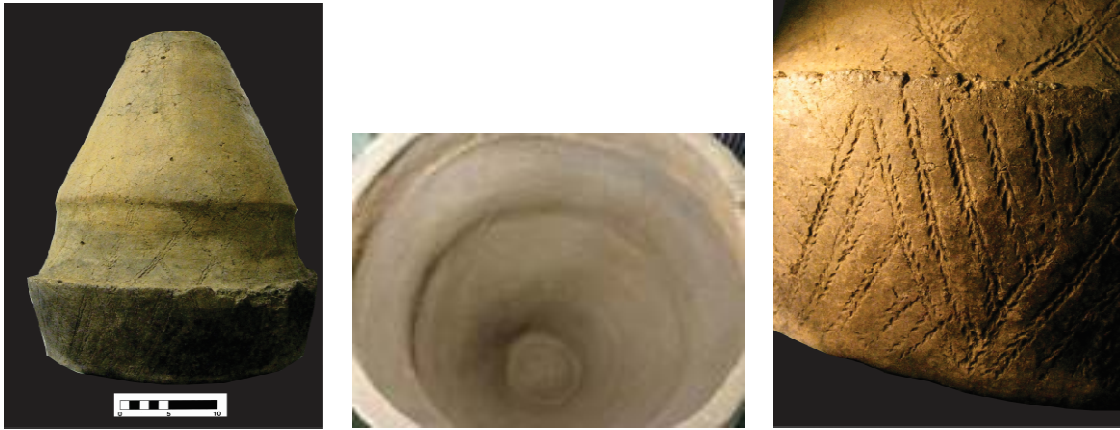
This pot, NMS X.EA 143, remains as the lower half of a probable Collared Urn (Longworth also lists this in this catalogue). NMS X.EA 143 has gently sloping walls, 13 mm wide, that narrow towards its base, creating a round belly. The shoulder is carinated and the cavetto above appears concave. The base is slightly convex inside and the transition is abrupt. The fabric of this pot is extremely gritty with very angular, gray lithic pieces, 5-7 mm and larger. A heavy slip covers this and the external surface is brown, the internal side brown with black patches and the core is brown/gray. There is no decoration on this pot, but a deep seed impression on the side. Only the base diameter could be measured, which is 93 mm, and a heavy deposit of manganate was noted on the outer base and a lighter covering on other parts

of the surface. The rim and collar are missing on NMS X.EA 143, so the estimate is that it is 65% of the pot that remains today.



NMS X.EA 144

NMS X.EA 144 is a Collared Urn with a slightly insloping rim and straight collar that abruptly bends outwards at the bottom to form an overhanging edge. The cavetto underneath is straight and ends with a carinated shoulder and then the pot walls, which are 16 mm wide, gently narrow towards a flat, slightly pedestalled base. The lower body is, therefore, rounded. Inside, the transition is gradual to a flat base. The upper portion of the rim inside was wiped heavily or scraped, as indicated by striations on the surface. Longworth (1984, 307) places this pot into the Secondary Series, North Western Style, Form IA. The fabric of NMS X.EA 144 is different from the previous pots described for this site. It is sandy with many inclusions, but these are rounded gray lithics, 4-6 mm and up to 10 mm wide, and pebbles up to 23 mm wide. It would appear that this clay was largely natural with few deliberately added inclusions. A heavy slip has been applied to the outside and this pot is dark brown with black patches (smoke clouds) on the outside and inside and the core is dark gray. The decoration on NMS X.EA 144 is done with heavy twisted cord (4 mm wide strand), incision and fingernail impressions. On the rim, three horizontal rows of twisted cord encircle the pot, whilst on the rim, alternating panels of vertical and horizontal lines are bordered by two horizontal lines. In the cavetto, vertical slashes fill the space, and fingernail impressions along the carination conclude the ornamentation. NMS X.EA 144 is 30 cm tall, the diameter at the rim is 240 mm and at the base, 94 mm. The entire pot has survived, but deposits of mangante were noted on the surfaces.



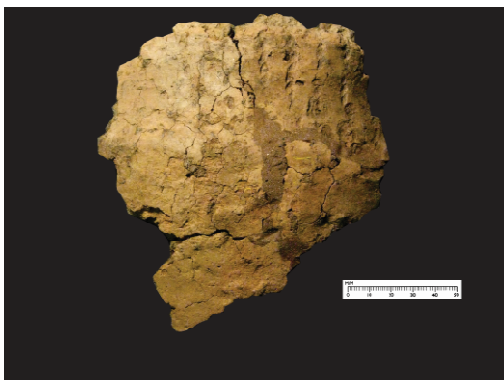
NMS X.EA 145

This Collared Urn is especially large. It has an insloping rim and a collar that slopes outward to form a pronounced, overhanging collar. The cavetto also bends outwards and ends in a carinated shoulder, and then the walls slant inwards quickly to form a vase-shaped profile to the flat base. Inside, the transition is abrupt to a convex, moulded base. Longworth (1984, 307) classifies it as Secondary Series, North Western Style, Form IA. The walls of this pot are thick: they are 20 mm wide. The fabric is obscured with a very heavy slip; however, much light gray/white, crushed lithic material was observed and measured at 2-3 mm wide and slightly less dark gray lithic material was also noted to be 5-7 mm and larger. NMS X.EA 145 is light brown on the outside with blackening on the rim; it is very black and sooty inside and the core is also black. The decoration on this pot is done with moderately-sized twisted cord (2 mm wide strand) in a zigzag pattern across the collar that creates opposing triangles that are infilled with opposing diagonal lines. From the collar to the shoulder, the same cord is used in a cross-hatched pattern. The pot is 45 cm tall and 380 mm wide at the rim. The base is 130 mm wide and the entire pot remains.



NMS X.EA 146

The Collared Urn, NMS X.EA 146, is recorded by Longworth (1984, 307) as Secondary Series, North Western Style, Form V. It has an insloping rim and a large, defined collar that begins straight at the rim, but then quickly bends outwards to a wide, overhanging edge. The walls below narrow gently to a very narrow, flat base, creating a conical shape. The fabric is gritty with angular gray lithics, 5-6 mm wide, but this is mostly hidden by a heavy slip that is medium brown with a black sooty deposit on the rim. Rows of twisted cord have been impressed on the rim top and two more horizontal lines of this cord form a border on the top of the collar outside. Similar to the pattern observed on NMS X.EA 145 and NMS X.EA 144, the collar is then ornamented with a zigzag of cord in which the triangles are filled with opposing lines of cord and a bottom border of two horizontals finishes the collar. Under the collar, cross-hatching with horizontal lines for borders fill the cavetto – again the same pattern as NMS X.EA 145. The entire pot has survived and it is 35 cm tall. The rim diameter is 280 mm and the base is 100 mm wide.



NMS X.EA 151

NMS X.EA 151 remains only as a partial rim with a flat top and gently-sloping collar and straight cavetto. The walls are 13.5 mm thick and the fabric is extremely gritty and friable. These include angular, dark gray lithics, 7-10 mm wide, grog, white, lithic flecks and sand. A heavy slip on both sides covers this and the surfaces are brown with a dark gray core. A heavy, sooty, black deposit is on the inner surface. Horizontal lines of heavier twisted cord (3mm wide strand) are on the rim and short lines of cord are on the collar and neck (about 20 mm long). This sherd represents about 10% of the original pot and it is very friable and fragmentary. Some manganate was noted on the surfaces and a rim diameter of 200 mm was obtainable.

8. Dalkeith, Midlothian



The urn from Dalkeith is not classified by Longworth, which maybe because it only survives as a lower half. NMS X.EA 48 is a medium-sized urn with a prominent, rounded shoulder and a vase-shaped profile. It is curvaceous and smooth in its contours, which suggests a potter who was skilled in their craft. The base is flat both inside and out and there is a gradual transition inside. The walls of NMS X.EA 48 are thinner, 9 mm thick, but the fabric used is extremely gritty with many large inclusions. Deliberately added angular black and gray lithic material averages at 8-10 mm wide. A heavy slip, now cracked, covers this and was fired to a red colour on the outside and black inside and in the core. There is no decoration on this pot today, although it is likely there was some on the collar and only a base diameter could be obtained, 94 mm. A black, sooty residue was noted in the pot and up one side of the interior vessel.

9. Cranston, Blacklaw Knoll, Slaughland Farm, Ford, Midlothian



NMS X.EA 54 is a well-made Collared Urn that is classified by Longworth (1984, 305) as Secondary Series, Form I. It is a heavy vessel with a flat rim and a concave collar that flares outwards to form a prominent edge that overhangs the vessel. The cavetto under this is deeply concave and a sharp carination marks the vessel's shoulder. The lower portion of NMS X.EA 54 is vase-shaped, leading to a flat base. Inside, the transition is abrupt to a flat base. The fabric is gritty, comprising dark gray, angular lithic pieces that measure 5-7 mm, and some up to 1 cm. A fairly heavy slip covers this, which gives the pot a red exterior and a dark brown interior over the core. A black, sooty residue covers the bottom $\frac{1}{4}$ of the pot inside. The pot is only decorated on the collar and this comprises diagonal lines of twisted cord that form triangles, several lines wide, bordered by a horizontal line at the top and bottom. About 90% of NMS X.EA 54 survives and it is 30 cm tall, 250 mm wide at the rim and 90 mm wide at the base. A fairly heavy deposit of manganate was noted over the vessel surface and calcium deposits in the grooves where the slip has worn away suggests a watery post-depositional environment.

10. Toxside Sandpit, Gladhouse Reservoir, Temple, Midlothian



Found inverted over the cremation of an adult female with a bronze awl, the Collared Urn from Toxside was placed by Longworth (1984, 308) into his Secondary Series, Form II. NMS X.EQ 424 has a flat, compressed rim and a vertical collar that flares outwards near the edge to hang over its narrow neck. The cavetto immediately bends out to the wide shoulder, then down steep-sided walls (approximately 16 mm thick) to a concave base. Impressions of straw or grass were noted on the base suggesting it dried in an upward position. Inside, the transition to the base is abrupt and the base is flat. The fabric is extremely gritty with sub-angular dark gray lithic material, most 5-6 mm, but many up to 12 mm. A heavy slip hides this and the pot is yellowish-brown on the outside and black inside and in the core. Blackening towards the rim on one side on the outside may have been caused by the pot's position in the fire during firing. About 95% of the pot remains and it is 37 cm tall, 310 mm wide at the mouth and 126 mm at the base. A few black specks on the surface may be a light deposit of manganate.

11. Outerston Hill, Temple, Midlothian



Two urns were uncovered at Outerston Hill: the first, NMS X.EQ 447, is a Collared Urn that Longworth (1984, 308) has in his catalogue, but does not place in a specific category, was found upright containing cremated remains and artefacts. The second, NMS X.EQ 448, is described by Longworth as having been sherds from a Cordoned Urn that were re-fired. He does not attribute this pot either.

NMS X.EQ 447 is a smaller vessel with a straight collar and straight cavetto. The shoulder is carinated and the lower part of the vessel is vase-shaped in profile with a flat, pedestalled base. Inside, the transition is gradual to a rounded base. The walls of this pot are thick, 17 mm, and the fabric is gritty with dark gray, angular lithic inclusions, 3-6 mm. A heavy slip covers this and the pot is brown on both surfaces with a dark brown/black core. The collar is the only part of the vessel that is decorated and it is done in twisted cord in panels around the pot. The panels are ornamented with patterns of herringbone, zigzag, opposing triangles and diagonal lines, each separated by vertical borders. Much of the collar and rim are missing from this pot and about 60% of it has been reconstructed so only a base diameter of 90 mm could be obtained.

12. Arniston, Temple, Midlothian



NMS X.EA 23

Whilst ploughing, two Cinerary Urns are reported having been found inverted over cremation burials; Longworth (1984, 305) lists the first, NMS X.EA 22, as Secondary Series, South Eastern Style, Form IA, but does not mention the second, NMS X.EA 23. NMS X.EA 23 is a much cruder vessel, but, based on Longworth's (1984) classification system, it is placed into his Secondary Series, South Eastern Style, Form BII.

NMS X.EA 22 has a heavy collar with a flat-topped rim that forms the upper 1/3 of the entire pot. A slight cavetto zone under the collar ends with a very finely carinated shoulder and then wall, which are 10.8 mm thick, narrow towards a missing base. The fabric is gritty, with many angular, dark gray lithic inclusions, 3-5 mm wide, but most much smaller. A slip on the outside covers most of this grittiness and the pot is orange/brown on the outside, dark brown inside with blackening towards the bottom. NMS X.EA 22 is decorated all in fine twisted cord in segments of about 4 cm long. On the rim there are diagonal lines with a horizontal one at the bottom and on the collar, horizontal lines texture the space. Even though the base is missing from this pot, about 90% of it remains and a rim diameter of 230 mm x 220 mm was obtainable.

NMS X.EA 23 is also heavy and it is a rough and crudely-made pot. It has a very large collar that comprises a cylinder that amounts to more than half of the entire pot. It has a flat rim and straight sides and is fit onto a plain cone with the join covered by a cordon. The walls, which are 10.6 mm thick, narrow towards a missing base. The fabric of NMS X.EA 23 is gritty with many angular, dark gray lithic inclusions. Some are 3-5 mm, but many are smaller. A very heavy slip covers these, which is fired to a reddish brown, although there is blackening towards the bottom on the inside. Only the collar is decorated on this pot. It was done by grooving diagonal lines into a lattice pattern and bordered by horizontal lines at the top and

bottom. The surface was smoothed after this decoration and so some of the grooves are smudged. Since the plough hit this pot, most of the bottom is missing and the remaining part accounts for about 45% of the original pot. The rim diameter is 260 mm. Manganate was also noted on the surface. In ceramic literature, much is made of the products of novices, but it is rare to find an account that a certain pot may have been constructed by one. Some argue that we simply do not find novice pots because they would not have been fired. I would argue here that this pot very well could represent the work of a novice. NMS X.EA 23 is heavier, more poorly formed and out-of-proportion than is usually seen in Collared Urns. The idea of what it should look like was clearly there, but the collar was made too large and so a cordon had to be used to fix it to the body. Moreover, the decoration is simpler than most of these pots and smoothing after it had been executed suggests the potter was trying to make it look the best they could under the circumstances.

13. Torcraik, Borthwick, Midlothian



The Collared Urn found at Forcraik (spelled Torcraik in Longworth's appendices) is listed as Secondary Series, Form I (Longworth 1984, 305). Catalogued as NMS X.EA 12 in the NMS, this pot has an insloping rim with a flattened top and a concave collar that flares out at the edge to hang over a deeply concave cavetto. The join of the collar to the pot is very well smoothed, but it also appears as though it is slumped. The shoulder has a sharp carination and

the walls, which are 10.8 mm thick, then narrow quickly to a flat base. The transition inside is abrupt to a flat base. NMS X.EA 12 is well-smoothed and has a heavy slip so it was difficult to determine the fabric exactly; however, angular dark gray lithics, 4-5 mm, and sand was observed in a portion of the vessel that had an eroded surface. There is no decoration on this pot and it is dark brown on all surfaces. It is 33 cm tall, 310 mm in diameter at the rim and 120 mm diameter at the base. The entire pot survives. A light deposit of manganate was noted on the collar and on one side and there is blackening on the inside near the base.

14. Magdalen Bridge, Joppa, Portobello, Edinburgh, Midlothian



NMS X.EA 37



NMS X.EA 43

Three cinerary urns were found at Magdalen Bridge, all containing cremations. Two, NMS X.EA 37 and NMS X.EA 43 are true Collared Urns and are catalogued by Longworth (1984, 308) as: Secondary Series, North Western Style, Form III and Secondary Series, North Western Style, Form III/IV, respectively. Longworth lists the third, NMS X.EA 38 as Secondary Series, North Western Style, Form IA, but the form of this pot is not that of a true Collared Urn and it appears that the potter was influenced in this case by the local Cordoned Urn tradition, which will be elaborated upon.

NMS X.EA 37 is a heavy pot with an insloping bevelled rim. On the outside, the collar is straight, but then flares out to form a defined collar. Underneath, the cavetto is straight, ending in an enhanced, carinated shoulder. The lower portion of the vessel is asymmetric, but narrows in a vase-shaped profile to a presumably flat base. Heavy scraping was noted inside the vessel, which may have been done to thin the walls since the pot is, overall, so heavy. The fabric of this pot is composed of clay and evenly dispersed, angular, dark gray lithics, 4-7 mm (and many smaller) and sand. A heavy red slip on the outside of the pot covers the grits

and the inner surface is an even brown colour. The walls are 15 mm thick. Only the upper half of the pot is decorated. In the rim bevel, three horizontal lines of twisted cord are impressed, whilst on the collar, diagonal lines of twisted cord in a zigzag create opposing triangle patterns that are infilled with opposing diagonal lines. The cavetto is adorned with simple diagonal lines in twisted cord, all in the same direction. Approximately 55% of NMS X.EA 37 remains, the rest is reconstructed, but a rim diameter was obtained, which is 250 mm.

NMS X.EA 43 is similarly large with an insloping, bevelled rim. The collar is straight and bends out slightly to form an overhanging collar and the join under this is well-smoothed. The cavetto is straight and slightly carinated at the shoulder and the walls, 15 mm thick, then gently slope inwards and down to a slightly concave base. The transition inside is abrupt to a convex base. The fabric of NMS X.EA 43 is also similar to NMS X.EA 37: it is a bit sandy and has many angular/sub-angular, dark gray lithic inclusions, which measure 3-6 mm, although several are up to 8-9 mm wide. A heavy slip on both sides is also red on the exterior and brown on the interior of the pot. The decoration on the rim bevel consists of a row of twisted cord and on the rim top is a zigzag of twisted cord. On the collar, zigzags of twisted cord, many rows wide, form triangle shapes, and in the cavetto crosshatching of twisted cord extends to the shoulder. About 70% of NMS X.EA 43 remains, the rest was reconstructed shortly after its discovery. It is 30 cm tall, 240 mm wide at the rim and 121 mm wide at the base, which makes for a sturdy, large pot.



NMS X.EA 38

NMS X.EA 38 has been classified by Longworth as a Collared Urn, but this appears to have characteristics of the Cordoned Urn tradition as well. The pot does not have a collar perse – it is a tripartite vessel where the three parts may have been formed separately, but appear now separated by cordons. The slope of the walls is straight under these cordons. However, the pot does not have the typical bucket shape of the Cordoned Urn tradition: the rim is internally-bevelled, a cavetto is formed by the cordons and the lower portion of the pot gently slopes inwards in a vase-shaped profile towards a slightly concave, pedestalled base. Inside the transition is abrupt/gradual with a convex base. These are Collared Urn traits. Especially since Magdalen Bridge is in Edinburgh, practically in the centre of the Cordoned Urn ‘province’, as it were, it would seem this is a hybrid vessel. It is related in decorative style and fabric to the other vessels found on-site, but in this case the potter was being creative and employing other methods in form. The fabric of NMS X.EA 38 is also very gritty with crushed, dark gray, and very angular lithic pieces, some 7-8 mm wide and many smaller. Quartzite was also used as an inclusion. A heavy slip was applied, but does not cover all of these opening agents. The external surface is red, as with NMS X.EA 37 and NMS X.EA 43, and the internal side is brown. On the rim, two rows of twisted cord are impressed into the clay, and the collar has rows of herringbone, divided by horizontal rows to form a vine pattern that is bordered at the top and bottom by a single horizontal. Between the two cordons in the ‘cavetto’, a diamond pattern of twisted cord has been made with opposing diagonal lines and a row of birdbone impressions on the lower cordon at the shoulder forms a lower border. A deep seed impression was also noted on the vessel wall. Although only 70% of the vessel remains and the rest is reconstructed, measurements were obtained of the pot’s dimensions: it is 27 cm high, 230 mm wide at the rim and 104 mm wide at the base.

15. Shandon Cres., Edinburgh, Midlothian



NMS X.EA 123



NMS X.EA 124

The acquisition note of the cinerary urns found at Shandon cres. in Edinburgh simply describes them as sherds of two vessels, “...of the common cinerary form, with heavy overhanging rims ornamented with indentations at intervals” (PSAS 1891, 6). Both of these were analysed NMS in Edinburgh and are catalogued as NMS X.EA 123 and NMS X.EA 124. The first has a flattened rim, which slants inwards and has a collar with a pronounced edge and thickening at the shoulder underneath. The walls, approximately 12 mm thick, then narrow to and oval, flat base to create a vase-shaped profile. Inside, the transition to the base is abrupt and the base is flat. The fabric of NMS X.EA 123 is very gritty and friable with dark gray angular lithic inclusions, sized 3-6 mm, and a heavy, brown slip covers the external side. The inside of the pot is gray and the core is black, demonstrating its quick, hot firing. The decoration on the pot is all twisted cord with a diamond pattern on the collar that is bordered on the top and bottom by a horizontal row and cord triangles in the cavetto. Stabmarks, possibly of birdbone form a bottom border at the shoulder. From the 50% that is remaining of NMS X.EA 123, it was determined that it was 28 cm high from base to rim, 215 mm in diameter at the rim and 130 x 110 mm at the base. Post-depositional pressures on the pot have resulted in cracking and scratching of the slip, the erosion of much of the decoration in the cavetto and heavy deposits of manganese on the collar and calcium on the pot side suggest extensive exposure to water.

NMS X.EA 124 has a similar insloping rim and emphasized collar, a straight cavetto and carination marking the shoulder, under which the walls (10.8 mm wide) slope in and down to a flat base. It also has an abrupt transition to the base on the inside of the pot, but the base is convex inside. The fabric is similarly gritty with many large angular inclusions of dark gray (3-6 mm) and light gray (5-7 mm) lithic material. A slip was applied to both surfaces and wiped, leaving faint striations and both sides are light yellowish brown. The core is black.

NMS X.EA 124 is less decorated with only fingernail impressions in the cavetto zone. The impressions seem to have been made by piercing the clay with fingernails on both hands and then dragging them to widen the impression. One stray fingernail impression was noted on the body. NMS X.EA 124 is slightly larger than NMS X.EA 123: it is 34.5 cm high, approximately 250mm in diameter at the rim and 100 mm diameter at the base. Approximately 80% of the pot remains (the missing portion is mostly from the rim and collar) but heavy manganese deposits on the surface suggest wet post-depositional conditions.

Longworth (1984, 306) catalogued both NMS X.EA 123 and NMS X.EA 124 as part of his Secondary Series; however, NMS X.EA 123 is placed in the North Western style, Form I and NMS X.EA 124 is described as Southeastern Style, Form IV.

16. Craigentenny, Edinburgh, Midlothian



A cinerary urn, NMS X.EQ 442, was found, “packed full” (PSAS 1937, 6) alongside sherds of a Beaker, NMS X.EG 71 (presented in the Beaker section), a bone pendant, calcined flint and a scraper. Longworth describes this urn as a Collared Urn of the Secondary Series, North

Western Style, Form III (Longworth 1984: 306). NMS X.EQ 442 has an internally bevelled rim that bends sharply downwards inside and a rounded collar that has a flaring edge on the outside. The collar is straight, but the walls (16 mm thick) bend inwards abruptly after the shoulder towards a flat base. The pot's construction in three parts is obvious with visible joins on the inside at the collar and shoulder, which emphasizes where the walls begin to narrow. The base is concave and pedestalled on the outside and the transition inside is abrupt to a flat base. Impressions of straw and two seed impressions were noted on the base on the outside. NMS X.EQ 442 is made of clay with typically gritty fabric, but there is a sandiness to the texture of the clay. Angular gray lithic material (3-5 mm, and some up to 8 mm) was used as an inclusion in the clay and both sides were well-slipped to create a smooth, dark brown surface over this. The core is dark gray.

The pot is decorated on its upper third and rim. On the bevel inside the rim, a zigzag of twisted cord, bordered by a row of horizontal cord at the top and bottom, are impressed. Similarly, on the collar, two rows of horizontal twisted cord at the top and bottom form margins for the central motif of zigzag in which each triangle is divided with a horizontal line of twisted cord. Beneath the collar, more half-hazard zigzag and diagonal lines of twisted cord ornament the circumference of the vessel to the shoulder.

NMS X.EQ 442 is 21 cm tall, 180 x 170 mm in diameter at its oval rim and 85 mm in diameter at the base. The entire pot remains, but a light deposit of manganese was noted at the base on the inside.

17. Braid Hills, Edinburgh, Midlothian



NMS X.EA155

The larger of the two urns at Braid Hills, NMS X.EA 154, was found while digging a golf course, destroying its base. Longworth (1984, 306) places this pot into the category of Primary Series, Form IA. When NMS X.EA 154 was excavated, a second, “...small urn of cinerary type”, NMS X.EA 155, described as Primary Series, North Western Style, Form Va by Longworth (1984, 306) was also uncovered. NMS X.EA 154 has a flat rim with an insloping collar that overhangs with an angular edge. The underlying cavetto is straight and the shoulder angular and prominent. The walls (16 mm thick) then slope inwards down to the base. The fabric is extremely gritty and there is a heavy slip on both surfaces that is red inside the pot, reddish-brown on the exterior and darkening towards the top where the pot lay on the ground. The dark gray lithic inclusions are angular, suggesting deliberate preparation and measure from 3-8 mm. The collar is decorated with a zigzag of twisted cord in which each triangle is infilled with opposing lines (horizontal and vertical). In the cavetto, a herringbone pattern produced by thumbnail impressions from both hands is the only ornament. The height of NMS X.EA 154 could not be determined since the lower ½ is missing, but the diameter of the rim is oval and measures 300 x 330 mm. Without the base, only 40-50 % of the pot remains.

NMS X.EA 155 is a smaller, collared cinerary urn with a flat-topped rim and collar that bends in towards the rim and out to hang over the body of the pot. The walls of the pot, 10 mm in thickness, then slope gently down and inwards to a flat base. Inside, the transition to the base is abrupt and the base itself is flat. The fabric of NMS X.EA 155 is similar to NMS X.EA 154 – it is extremely gritty, but with a lot of gravel that looks natural since much of it is rounded in shape (3 mm) and varies in colour. Some of these inclusions, however, seem to have been crushed and pieces of red and gray lithic, measuring 2-4 mm, are mixed into the matrix. A slip has been put on both surfaces, but the outside is particularly well-wiped. The internal surface is brown with darkening towards the base, the external side is red and the core is dark gray. NMS X.EA 155 is decorated on the rim with grooved diagonal lines and light grooves were employed in a lattice on the collar to form a diamond pattern. Under the rim, diagonal grooves in the opposite direction to those on the rim reach the shoulder where two horizontal rows of triangular (birdbone?) impressions were placed. Although some portions of the rim are missing from NMS X.EA 155, this description is based on 95% of the pot, which measures 13 cm high, 140 mm at the rim and 78 mm at the base.

18. Windy Goul, Arthur's Seat, Edinburgh, Midlothian



Recorded as having stood upright in a pit with a slab of stone on two sides and on top of the pot, NMS X.EA 25 is registered as a Collared Urn of the Primary Series, Form IA (Longworth 1984, 306). It is a small pot with an inturning, flat rim and sloped collar that

bends out to a prominent edge. The cavetto under this is deeply concave and ends with a sharply carinated shoulder that is at a width less than that of the collar. The pot then narrows in a vase form down to a flat (?) base. The transition inside is abrupt/gradual to a flat base. The walls of NMS X.EA 25 are fairly thick (10.5 mm) for a pot so small (19 cm tall, 136 mm at the rim and 75 mm at the base), and the fabric is extremely gritty with inclusions. Many of these are very large and angular, and some pebbles are noticeable, but most are very angular dark gray lithics, 3-4 mm, and rounded pieces of calcite. The surfaces of the pot are slipped, but the pot looks overfired and has dark brown/black surfaces. All of the decoration on NMS X.EA 25 is made by twisted cord impressions. On the collar are alternating panels of six rows of vertical and then six rows of horizontal lines. In the cavetto diagonal lines encircle the pot. Since only a piece of the rim is missing, the surviving pot is estimated at 99% of its original form. A deposit of magnanate was noted on one side of the pot and a white discolouration is on the outer surface of the pot (possibly due to the firing conditions).

19. Juniper Green, Edinburgh, Midlothian



The Collared Urn found at Juniper Green fits into Longworth's (1984, 306) Secondary Series, Form IA, and was found in along with a Beaker and Food Vessel. The Beaker is described in the Beaker section of this chapter, but the Food Vessel was unavailable for analysis.

The Collared Urn, NMS X.EA 153, has a flat rim with a collar that is concave, but flares out to a prominent edge. A join is visible where the collar was attached to the vessel. The underlying cavetto is deeply concave and ends with a sharply carinated shoulder. Under this, the walls, 10.3 mm wide, bend sharply inward down to a flat base. Inside, the transition is abrupt to a flat base. The fabric of NMS X.EA 153 is extremely gritty and friable with angular, dark gray lithics and grog composing much of the clay matrix. Many of these are large, but most are 3-4 mm and up to 8 mm. A heavy slip was put on both sides to hide this fabric and fired to a reddish brown hue. The core is dark gray and there is a blackening inside in the base. The pot is decorated with very fine twisted cord that is lightly impressed into the sides. The rim is decorated with diagonal lines of cord. On the collar, a zigzag pattern of cord encircles the rim and in the cavetto the cord is impressed in a double row of cord zigzag so as to create inverted and upright triangles. On the carination, a row of deep thumbprints are impressed. The lightness of the cord impressions and the obvious effort to make the thumb impressions that resulted in wide, round indents suggests that this pot was decorated when it was drier than the others analysed and could not take the impressions as easily. Large body sherds of NMS X.EA 153 are missing and so only 50% of the pot remains, but from this it can be determined that it was 39 cm tall, 310 mm x 290 mm at the mouth and 97 mm at the base. Deposits of manganate were noticed on both sides of the surface.

21. (Stackyardfield), Gourlaw, Midlothian



NMS X.EA 164



NMS X.EA 165



The two Collared Urns found at Gourlaw are well formed and were both found inverted in funerary contexts. Longworth (1984, 307) classifies NMS X.EA 164 in the Primary Series, Form IA and NMS X.EA 165 as Secondary Series, Form I. Both were available for analysis.

NMS X.EA 164 has an insloping, flat rim that hangs as a ledge above the internal rim. The collar on the outside of the rim bends outwards to the edge that overhangs and a deeply concave cavetto under this ends with a carinated shoulder. The form of the lower pot is not as splayed as other Collared Urns and, indeed, could be said to border on the globular as the walls (14 mm thick) are rounded as then narrow to the base. Inside, the transition is gradual to a flat, reconstructed base. The fabric of NMS X.EA 164 is characteristically extremely gritty with medium gray lithic material. These inclusions are angular and are 5-7 mm in width. A heavy slip was applied to NMS X.EA 164, but it does not cover all of these inclusions. The pot is yellowish-brown on both sides and has a gray core. The inside of the rim is decorated with incised herringbone with two rows of cord impressions underneath. On the collar and in the cavetto the area is ornamented with incised herringbone. The entire pot remains for analysis and it is 36 cm tall, 320 mm wide at the mouth and 118 mm wide at the base. A scrape, perhaps from a plough, is visible down one side of the pot and a light deposit of manganate was noted just inside the rim.

NMS X.EA 165 is a smaller pot with an internally-bevelled rim and a straight collar that flares outwards at the bottom to form a solid edge. A slight inward bend and straight cavetto form the wall beneath this and the shoulder is only slightly pronounced. Like NMS X.EA

164, the belly is more rounded than often seen with Collared Urns and it gradually narrows to a wide flat base. Grass or straw impressions and a possible seed impression were noted on the side of the pot. Inside, the transition is abrupt to a flat base. The fabric of NMS X.EA 165 is sandy with many smaller lithic pieces and a few larger ones. The smaller are rounded dark gray lithics, 2-3 mm, and appear natural, whilst the larger, extremely angular dark gray lithics are up to 10 mm wide and were obviously prepared. Overall, it seem the clay used was naturally sandy and gravelly. The outside of the pot is slipped and burnished and brown in colour. The inside is similarly coloured and the core is black. NMS X.EA 165 is decorated inside rim with short vertical rows of twisted cord bordered at the top by two horizontal rows of cord. On the collar, cord impressions in a zigzag pattern creates triangle shapes that are infilled with short horizontal cord lines. Under the collar, vertical rows of twisted cord fill the cavetto and this is bordered at the bottom on the shoulder with one horizontal row. Only a piece of the base of this pot is missing, leaving about 99% for this analysis and the pot is 12.7 cm tall, 117 mm at the rim and 74 mm across at the base.

22. Cairnpapple, Torphinchen, West Lothian



NMS X.EP 178

Amongst the many pots found at Cairnpapple, two fall into the category of Collared Urn. NMS X.EP 178 is listed as Secondary Series, North Western Style, Form III by Longworth (1984, 308) and NMS X.EP 180 is Secondary Series, Form IV (Longworth 1984, 309). However, the details of NMS X.EP 178 and NMS X.EP 180 are so similar it would not be surprising if they had been made by the same potter or by closely-related (or descended) potters.

NMS X.EP 178 has a flat-topped, oval rim that bends out at the collar to hang over the body of the pot. A straight wall underneath, 15 mm thick, curves out to a carinated shoulder, then narrows quickly to a flat base. Inside, the transition is abrupt; the wall/base junction has been smoothed so that the base is convex inside. The fabric of NMS X.EP 178 is gritty and, although a heavy slip has been applied to the outside, very angular dark gray and light gray lithic inclusions are still visible through this. They measure 3-7 mm in width, but there are many that are much larger. The slip is reddish brown and the pot is dark brown inside, with a blackened part up one side and in the base. All surfaces are heavily wiped. Decoration is restricted to the collar on NMS X.EP 178. Two horizontal rows of twisted cord form a border on the top and bottom and in this, alternating segments of vertical rows and horizontal rows form panels around the pot. NMS X.EP 178 is 29 cm tall, 280 mm x 260 mm at the rim and 145 mm at the base. About 95% of the pot remains and there are a few patches of manganate deposited on the surface.

NMS X.EP 180 is a very large pot with an insloping rim and a straight collar that has a well-defined edge that is formed by an applied cordon. There is a straight cavetto under this that ends in a cordon-defined shoulder and 16 mm thick walls that narrow to a flat base. Inside, the transition is gradual to a flat base. Like NMS X.EP 178, a thick slip has been applied to the outside of this pot, obscuring the fabric from view, but it is likely that the fabric is gritty as angular gray lithics and rounded light gray lithics, 6-8 mm wide and many larger, can be seen through this. All of the surfaces are dark brown and the core is brown as well. There is a blackened patch in the base inside that spreads up one side of the pot. Decoration again is only on the collar and rim. A horizontal line of twisted cord forms a top border and two horizontal lines of twisted cord form the bottom border. Inside this, twisted cord in a cross-hatched pattern fills the space. A zigzag of twisted cord is on the rim top. Some

reconstruction has been done on the rim and base, but 95% of the vessel is original. It is 39 cm tall, 350 mm x 330 mm at the rim and 124 mm at the base.

23. Drumshargard, Cambuslang, Lanarkshire



NMS X.EA1



Sherd



The note of acquisition for the museum in 1883 mentions a cinerary urn and a food vessel; however, the pots examined in the NMS include a Collared Urn, NMS X.EA 1, and a base sherd of a second vessel (which could likely be a Food Vessel). NMS X.EA 1 is listed by Longworth (1984, 309) as Secondary Series, Form IV. It is a well-formed vessel with smooth contours and form that is slightly heavy than other Collared Urns – certainly a well-made pot. The rim slopes inwards inside the pot and the collar is slightly concave, bending outward at the bottom to form the overhanging edge. The cavetto zone is smooth and straight to the shoulder carination and then the walls, 15 mm thick, narrow to a slightly concave base. Inside, the transition to the base is abrupt and the base is slightly convex. The fabric is fairly gritty with angular dark gray lithic material, 2-3 mm and 5-6 mm, used as an opening agent amidst the red clay. A heavy slip is on all surfaces, which is dark reddish-brown outside and brown inside with darkening at the very bottom. The core is brown. The entire pot of NMS X.EA 1 is present and it measures 23 cm high, 180 mm at the rim and 94 mm at the base. It is completely undecorated, but striations from wiping the slip are evident.

The sherd packed with NMS X.EA 1 is a base sherd from a pot with a flat base that is pedestalled and walls that bend quickly out, forming a vase-shaped vessel. Inside the transition is gradual to a flattish base. The fabric is sandy with many small of sub-angular, black lithic material, most 0.5-2 mm and a few up to 3 mm, and sand. A very heavy slip is

dark reddish-brown on the outside and light yellowish-brown on the inside while the core is dark gray. Rows of short, diagonal, twisted cord maggot impressions form a zigzag pattern on the external wall. The sherd represents less than 5% of the original pot, but all of the attributes suggest this belonged to a classic Food Vessel.

24. Sherifflats, Thankerton, Lanarkshire



NMS X.EA 28

Within the cemetery at Sherifflats, a cordoned urn (NMS X.EA 27), cinerary urn of unknown type (NMS X.EA 28), three Food Vessels (which are described in the Food Vessel section) and the accessory vessel, NMS X.EC 20 (described in its section), were found.

NMS X.EA 28 is rimless, but has a straight neck that thickens at the shoulder and is defined by an applied cordon. The walls, which are 16 mm thick, narrow quickly in a vase-shaped profile to a flat, pedestalled base. Inside, there is a cone on the base that was formed as the transition was made abrupt. The fabric, like NMS X.EA 27, is extremely gritty with very angular, dark gray and black lithic inclusions. The pieces are mostly 9-11 mm wide, but some are smaller, and these erupt from the surface and the fabric is friable. A yellowish brown slip has been applied over this on both sides and there is a blackened patch in the base inside and up one side. The only ornament on NMS X.EA 28 are triangles in twisted cord that have been impressed in rows of three lines wide. A measurement of 350 mm x 330 mm was taken very near where the rim would have been on this vessel and a base diameter was obtained as 130 mm. The remains of this pot, about 70% of the estimated original, is 34 cm tall. A moderate calcium deposit was observed on the side of the pot.

25. Hangingshaw Plantation, Lamington, Lanarkshire



Above right: internal rim decoration, looking from the hole in the base of the pot; Bottom: there is a visible join where the collar was placed on the pot.

Found inverted over a cremation burial, this Collared Urn was later placed by Longworth (1984, 311) in the Primary Series, North Western Style, Form IA. At the NMS, this pot is catalogued as NMS X.EA 161 and has an insloping internal rim bevel, a straight, overhanging collar and a straight cavetto that ends with a sharply carinated and emphasised shoulder. The walls, 10.7 mm thick, narrow to a flat, pedestalled base. Inside the pot, joins are visible where the collar and neck portions were placed on the vessel. The fabric is extremely gritty with very angular lithic material, 5-8 mm, although many very large, and grog. This is not covered well on the surfaces and if there is a slip, it is very light. The surfaces of the pot are yellowish brown and there is blackening around the rim. The core is dark gray. In the rim bevel, the decoration is inconsistent. On one side, there is a zigzag pattern of twisted cord, whilst on the other, there are diagonal lines of cord that meet a border formed by a horizontal line. The collar is decorated with diagonal lines of twisted cord that

form a diamond pattern and this is bordered at the top and bottom by a horizontal line of cord. In the cavetto, wider-spaced diagonal lines form diamonds as well. About 90% of the original pot remains and from this it was determined to be 32.5 cm tall, 250 mm at the rim and 110 mm at the base.

34. Monklaw, Jedburgh, Roxburghshire



NMS X.EA 208



NMS X.EA 208b

A Collared Urn and the base sherd of a second urn were found in the 1930s near Jedburgh and are now listed as NMS X.EA 208 and NMS X.EA 208b in the NMS. Longworth (1984, 293) attributes NMS X.EA 208 to his Secondary Series, North Western/South Eastern Style, Form IC. The pot was found inverted over the cremation of an adult female in a flat grave and the base sherd in a separate grave 36 feet away.

NMS X.EA 208 is a large, heavy pot with an internally-bevelled rim that slopes inwards. The collar is slightly concave and bends out to an angular edge that hangs over the rest of the pot and, in particular, a straight cavetto. The shoulder is carinated and low and then the pot

narrows quickly to a slightly pedestalled, concave base. Inside, the transition to the base is abrupt with a flat base. The walls measure 10.5 mm thick and are composed of a smooth fabric. The lithic material is dark gray and very angular, up to 5 mm in size, but many are smaller and they show evidence of having been prepared by crushing. The pot is slipped on both sides and is reddish-brown on the outside, medium brown on the inside and has a dark gray core. The decoration is all of twisted cord with a double row of triangles around the rim top and diagonal lattice on the collar forming a diamond pattern that is bordered at the top and bottom by two horizontal lines. On the neck cavetto, this diamond pattern is repeated and a row of inverted horseshoe shaped impressions (birdbone knee?) is just above the shoulder carination. NMS X.EA 208 is 21 cm high and it has an oval rim, measuring 205 mm x 195 mm, but a round base, 104 mm. Approximately 60% of the pot remains, whilst the rest is reconstructed.

The remains of NMS X.EA 208b comprise only about 5% of the original pot as a base sherd and a few body sherds. The vessel would have been a heavy, large one with thinner walls than NMS X.EA 208 (measured 10 mm here) and a thicker base. The transition to the base is abrupt and the base is flat inside and outside. The fabric is similarly fairly gritty with many larger pieces of lithic, but most are subangular, light gray, and 3-5 mm. Sand forms a component of the make-up as well. A heavy slip on the outside is brick red and the inside of the pot is black and sooty, although this is not unusual for the lower portion of urns. The core is dark gray. The sherd is undecorated, again common for the lower portions of urns, and measures 155 mm in diameter. An encrustation of black matter was noted on the inside of all of the sherds of NMS X.EA 208b.

35. The Kip, Falla, Oxnam, Roxburghshire



Found in the upper levels of a cairn, thought to be a late intrusion and later than the cist burials beneath, was found the Collared Urn, NMS X.EQ 537, associated with a cremation. Longworth (1984, 294) places this pot in his Primary Series, Form IA category. NMS X.EQ 537 has a flat rim with an outward sloping collar, a narrow cavetto neck and a well-defined, well-carinated shoulder. The lower walls, 15 mm thick, narrow quickly to a pedestalled, flat base. Inside, the transition to a rounded base is gradual. The fabric of NMS X.EQ 537 is extremely gritty with many crushed, angular, white lithic material, and subangular, light gray lithic material (3-5 mm). Grog was also identified in the core. A heavy slip covers both sides of the pot and it is fired yellowish-brown on the outside and dark brown on the inside. The core is black. Incised herringbone ornaments the collar, whilst in the neck, alternating panels of horizontal and vertical lines were formed with whipped cord impressions. NMS X.EQ 537 is 36 cm tall, 300 mm in diameter at the rim and 97 mm in diameter at the base; however, these measurements must be taken with caution since only about 50% of the pot remains and it has been reconstructed from sherds (a note on the reconstruction is in Gunn 1920-1).

39. Chesters, Ancrum, Roxburghshire



The Collared urn from Chesters, Ancrum is not listed in Longworth's (1984) volume, but fits the Secondary Series, North Western Style, Form IIIa. It has an insloping, flat rim that overhangs the wall of the vessel on the inside and a straight collar that bends outwards near the bottom. This overhangs a straight cavetto that has a pronounced carination at the vessel shoulder (which is set low on the pot) and the walls bend quickly in and down to a pedestalled base. The transition and bottom are not visible due to reconstructive material. The walls of this urn are 19 mm thick and the fabric is very gritty with angular/subangular, light gray lithic material that ranges 4-6 mm wide. A heavy slip is set over this and the walls are reddish brown over a dark gray core. Decoration on this vessel consists of impressions made with a finely-twisted cord (1.5 mm strand). Diagonal lines ornament the rim top and a vertically-set zigzag is on the collar, followed by a row of short, diagonal lines just underneath the collar moulding. In the cavetto is a row of inverted triangles that are infilled with herringbone (photo 2). About 80% of the original vessel remains and it is 250 mm in diameter at the rim, 87 mm wide at the base and about 18 cm tall.

Roxburghshire?



TO249 is a Collared urn of unknown provenance from Roxburghshire, which is not in Longworth's (1984) volume, but would fit his Primary Series, IIIb. It remains as part of a rim and a wall from a vessel with an insloping, flat rim and straight collar that is well-moulded to overhang the vessel. The cavetto is straight to the carinated shoulder and the belly is gently rounded towards the base. The fabric is very gritty with angular, dark gray lithics up to 7 mm wide, rounded, white lithics, 4-6 mm wide and grog. A very heavy slip covers this and the surfaces are medium brown with a dark gray core. Deeply-set twisted cord (2 mm wide strand) was impressed in horizontal rows on the rim top and on the collar, horizontal rows with diagonal lines cutting them ornament from the rim edge to the base of the collar. Diagonal lines fill the cavetto and this is bordered at the bottom with a single horizontal line. The rim diameter of this vessel is 280 mm, but no other measurements could be taken since only about 40% of the vessel remains.

40. Longcroft, Lauderdale, Berwickshire



Three vessels were found at Longcroft: two Food Vessels (described in the Food Vessel section) and a Collared Urn, NMS X.EQ 617. This pot has a flat, insloping rim with a moulded collar that is slightly sloped to form an overhanging edge. The cavetto is very straight and the shoulder has been moulded to be prominent and sharply carinated. The walls then bend quickly inward down towards a missing base. The walls are 10.1 mm thick, but the fabric was not discernable because of the reconstruction work. Through the surface, crushed black lithic inclusions were visible, but this was all. The external surface of NMS X.EQ 617 is reddish brown and the internal surface is medium brown. The core is black. Decoration on this vessel has been done with incised lines. On the collar, horizontal lines separate two panels: the first has a cross-hatched pattern, whilst the second has a pattern of triangles infilled with diagonal lines. In the cavetto, cross-hatching has been done to create a diamond pattern. About 85% of the original pot remains and the rest has been reconstructed. A light deposit of manganate was noted inside vessel.

41. Lintlaw, Bunkle & Preston, Berwickshire



Two urns were found near to one another, inverted over cremation burials. NMS X.EA 202 is a Collared Urn, catalogued by Longworth (1984, 293) as of the Secondary Series, Form IA, whilst NMS X.EA 203 has the form of a bipartite Vase Urn. NMS X.EA 203 is, therefore, described in the Vase Urn section.

The rim of NMS X.EA 202 is uncommon as it seems to have been made by placing a strip of clay on the vessel (approximately 1-2 cm thick) and pressing down to form a flattened insloping rim. Indeed, the entire pot is rather crude; its overall form is that of a Collared urn, but the use of cordons suggests influence from that tradition as well. The collar is convex and

bends outwards at the bottom by grace of a cordon that has thickened it. The cavetto is straight and the shoulder carinated. The walls (10.8 mm thick) then narrow to a pedestalled, flat base. Inside, the transition is abrupt to a flat base. The form, however, is by no means symmetrical and the pot seems heavier and leaning on one side than the other. The fabric is difficult to discern as the pot is heavily slipped and heavily restored. Dark gray angular lithic material (3-5 mm) was noted and the core is dark gray. The external side is dark brown and the inside is covered with plaster paris. The pot is decorated on the rim top with alternating oval impressions (likely plaited cord) forming a vine pattern. Around the collar, alternating rows of vertical and horizontal twisted cord are placed to the collar cordon. Short vertical rows (about 6 cm long) ornament the cavetto and body of the pot. NMS X.EA 202 is 38.5 cm tall and it has an oval rim that measures 330 mm x 345 mm and a round base with a diameter of 127 mm. The entire pot remains, but reconstruction is heavy on the inside. Manganate was noted on the external surface and blackening on the rim is evident.

44. Hoprig, Cockburnspath, Berwickshire



Right photo: scraping in the cavetto zone.

Along with two Beakers and a Vase Urn (described in their respective sections), a Collared Urn, NMS X.EA 209, was uncovered at Cockburnspath, Berwickshire. This vessel is described by Longworth (1984, 293) as Primary Series, Form IA. It is small with a flat rim that bends out to the collar edge. The cavetto is straight, but bends sharply out to a carinated shoulder and then narrows in profile to a (presumably) flat base, which is missing. Scraping is evident in the cavetto and the collar join is well-smoothed (photo 2). The walls of this vessel are thin, about 10.1 mm, and the fabric is gritty with angular black lithic inclusions, 2-

3 mm thick. The pot is well-slipped and the surfaces are yellowish brown and the core is black. NMS X.EA 209 is not decorated, but it is well wiped and smoothed. The diameter measures 200 mm, but the missing base makes it impossible to determine the pot's height or base diameter. About 95% of the pot remains and there is a blackened, ashy deposit inside towards the base.

45. Berwickshire ?



NMS X.EA 184

NMS X.EA 184 is a Collared Urn that Longworth (1984, 294) describes as Primary Series, Form IB. It has an inturned rim that slopes inwards inside and a straight, but defined, collar. The shoulder is carinated at the base of a straight cavetto and the body is long and vase-shaped with a flat base. Inside, the transition is abrupt to a flat base. The walls of this vessel are very thin for a Collared Urn and measure only 10.1 mm thick, but the fabric is typically gritty with crushed, dark gray lithic inclusions. These were measured and found to be 3-5 mm wide, on average, but a poor reconstruction of the vessel has made it more difficult to discern. A possible slip (very light, if present) is red/pink on the outside and the interior of NMS X.EA 184 is gray. The core is dark gray. The pot reaches 29 cm in height and the rim diameter is 230 mm, whilst the base is 106 mm across. About 40% of the pot remains in this reconstruction and plaster has been put over much of the original pot.



NMS X.EA 186

The rim sherd that is NMS X.EA 186 is from a heavy pot with an internal rim bevel. Longworth (1984, 294) places it in the Primary Series, Form I category. On the outside of this rim, the collar slants out to the collar edge that overhangs a straight cavetto zone. The shoulder bends outwards, but does not survive sufficiently to describe whether it is carinated or not. The walls are 14 mm thick and the fabric is extremely gritty with angular gray lithics. They measure 5-8 mm wide and a heavy slip that is well-wiped on both sides of the pot cover most of them. NMS X.EA 186 is yellow with blackening towards the rim on both sides and it has a brown core. The decoration consists of rows of circular impressions on the outside, inside and on top of the rim. This is the only example of this motif in the study area. Only about 5% of the original pot remains, but a manganate deposit was noted on this rim and a diameter of 230 mm was obtained.

46. Ford, Northumberland

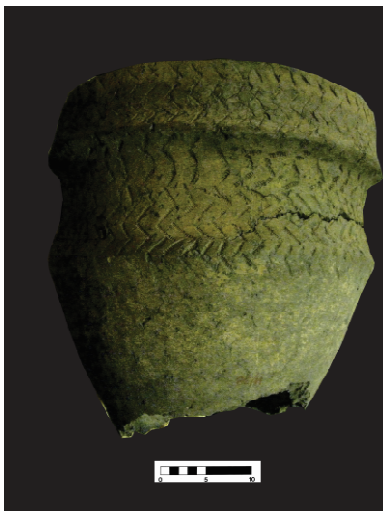


BM 1879, 1209.1389

Several sherds, representing several pots, were found by Canon Greenwell near Ford in Northumberland and others were given to him by farmers and fell walkers that came across them in their routines. These are now kept in the British Museum. Pot 1389 was found in Barrow 184, burial 4, and is listed by Longworth (1984, 236) as Ford, Etal Moor, and is placed in his Primary Series category. It has an inward-bending rim with a squared top and is

thickened at the collar to overhang a straight neck. Its characteristics are Bronze Age, but are also reminiscent of Fengate Ware in the Impressed Ware tradition. The walls are unusually thin for Bronze Age pottery – 8 mm – and the fabric, although gritty with inclusions, also has a corky texture, which suggests that organics were included. Prepared lithics, angular and white, red and blue/gray were found to be 3-4 mm, 5 mm and 2-3 mm wide, respectively. The pot has a dark brown slip on both surfaces, but possibly due to its thin walls, the core is red and this red hue underlies the slip. Cross-hatching of very fine twisted cord (less than 1 mm wide strand) ornaments the collar, whilst thicker twisted cord (2 mm strand) was impressed randomly in vertical maggot shapes under the collar. The four rim sherds and fragments that comprise this pot represent only about 40% of the original vessel (if that).

49. Milfield, Northumberland



The Collared Urn from Milfield is not listed in Longworth's (1984) appendices. The characteristics of this vessel, however, place it within the Primary Series, Form IA. It has a straight collar that bends out to the edge to overhang a straight cavetto that ends with a carinated shoulder. The walls, which are 13.5 mm thick, slope gently inward to create a rounded vase shape and the base is missing. The fabric is extremely gritty with many angular dark gray inclusions, most 7-9 mm wide, but some up to 12 mm. A few white flecks of white (possibly calcite) lithic material were also noted. The external surface is dark brown with a reddish undertone and the inside is brown with yellow. The core is dark gray. The Milfield Collared Urn is decorated with vertical rows of whipped cord that form zigzags that overlie all of the contours of the pot from rim to shoulder. About 70% of the pot remains, and the pot is currently 30 cm tall without its base. The rim is 280 mm across.

50. Tom Tantallon's Grave, Kirknewton, Northumberland



1979, 1209.1777

Longworth (1984, 236) places this Collared Urn into his Primary Series, but lists it simply as Kirknewton. In the British Museum and in Greenwell & Rolleston's (1877) *British Barrows* it is catalogued to Tom Tantallon's grave. These two rim sherds and body fragments are from a pot with thin walls (8.5 mm wide). The rim slopes inwards forming the collar, which is thickened at the bottom by a cordon. This overlies a straight neck and a vase-shaped profile. The fabric has a gravelly texture and prepared, angular lithic material in blue/gray and light gray colours are 3-5 mm and 2-3 mm wide, respectively. Gravel, presumably natural, is also present in this clay and this along with the deliberate inclusions. Like the Ford sherd, 1389, the colour of this pot is dark brown overlying a brick red colour. The core in this pot, though, is dark brown. Very finely whipped cord was used to decorate this pot and a row of this is impressed inside the rim and two more rows are on the outside of the rim at the top of the collar. Under this, triangles impressed by twisted cord surround the pot on the collar and some of these are filled with horizontal rows of the same twisted cord. Two rows of whipped cord then border this at the bottom of the collar. On the neck of the vessel, vertical maggot impressions of whipped cord were pressed into the clay. The diameter of the rim is 125 mm; however, the base and height of the vessel were not obtainable since only about 30% of the original pot has survived.

51. Doddington Moor, Northumberland

Canon Greenwell's work in Northumberland uncovered five Collared Urns from round barrows on Doddington Moor, which are listed in the British Museum as BM.1879, 1209.1778, 1178a, 1778b, 1778c and 1778d. All survive in fragmentary form, but information is still discernable.



1879. 1209, 1778

Longworth (1984, 235) places 1778 in his North Western Style, but was unsure of which series due to the lack of preservation. This rim sherd displays a slanted collar that flares outwards at the bottom by the application of a cordon (the join is visible under the collar, as pictured above). The neck is straight under this and the wall appears to be rounded in profile. The walls are about 10.5 mm thick and the fabric is somewhat gritty. Angular, dark gray lithic material, 3 mm wide, is deliberately added, but rounded white lithics, 5-7 mm wide, appear to be naturally part of the clay. A slip was put on the surfaces of this pot and it is dark brown with reddish hue on the outside. The core is black. The collar of this pot was decorated by fine twisted cord (1.5 mm wide strand) in parallel diagonal lines in a triangular pattern. A pattern of opposing diagonal lines in cord on the neck creates large X-shapes. These sherds are estimated as having been only 5% of the original pot. A darkening in the colour was also noted on the rim near the top.



1879.1209, 1778a

The sherds that comprise pot 1778a indicate a sloping rim and collar that was defined by a cordon. The walls are about 11 mm wide and the fabric is gritty with angular, white lithic inclusions. These are 1-2.5 mm wide, although some are up to 4 mm, and are not calcite. The colour, similar to 1778, is dark brown on the surfaces with a dark brown core, but a reddish hue seems to emanate from under this. The pot is decorated with finely twisted cord (1 mm wide strand): there are three rows on the rim top, three more just outside the rim and parallel diagonal lines forming a triangular pattern on the collar. This is bordered at the bottom of the collar by a further three horizontal rows. The diameter of the rim is 150 mm, but the rest of the dimensions of this pot were not discernable because only 10% of the original pot remains.



1879, 1209. 1778b

Pot 1778b remains as a few body sherds and a base sherd of a pot that was slab/coil built (join observed) with a flat bottom and a gradual transition. The walls are 9.5 mm thick and the fabric is very gritty with many small lithic inclusions. These are angular and white (1-2 mm) and very angular and dark gray (3-4 mm). The surfaces are dark brown and the core is dark gray. There is no decoration on 1778b. This pot is heavily eroded and crumbles easily so it is most likely for this reason that only 5 % of the pot remains.



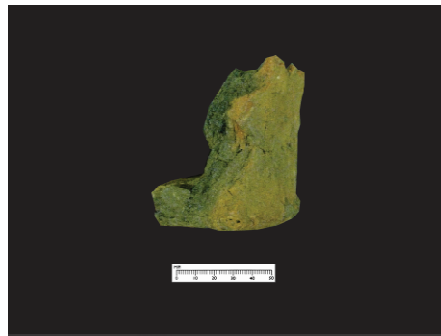
1879, 1209.1778c



1879, 1209.1778d

Pots 1778c and 1778d have the same fabric, decoration, colour and form and so they are treated here as the same pot. These form the lower portion of a pot with a flat base and gradual transition. The walls are 9 mm thick and the fabric is very gritty with very angular light gray/white inclusions, 1-2 mm, and rounded white lithics, 3-4 mm in the clay. Grog was also added. The pot was then slipped and wiped and decorated with loosely-twisted cord. The surfaces are brown with a red undertone. Collectively, 1778c and 1778d make up only about 1% of the original vessel.

56. Howick Heugh, Northumberland



1935.20



1979.49

Two pots were found at Howick Heugh at different times (see Appendix 1 for descriptions of the excavation). These have similarities in form and fabric, so they are both described here. Jobey & Newman's 1979 pot represents about 55% of a Collared Urn that Longworth (1984, 236) places in the Secondary Series, South Eastern Style, Form BII/BIII. It is a small pot with an inturned, square rim that slopes gently out to a defined collar with a cordon. The walls then gently slope inward down to a wide, flat base. Inside, the transition has been made more abrupt by scraping along the join and a groove, possibly made by the potter's fingernail is visible (see photos above). The outside of the base is textured, as if the pot was dried whilst sitting on straw and a seed impression was observed. The walls of this vessel are 12 mm thick and the fabric is gritty with deliberate inclusions. These consist of crushed grit – some are very angular, whilst others are more rounded, but they all measure 4-6 mm. Larger pieces of whitish gray lithic, 2-3 mm up to 5 mm wide, were also noted. The Howick Heugh pot is light brown on the outside, light gray inside and it has a gray core. It has two rows of twisted cord on the rim and five rows on the collar. Short vertical rows of twisted cord are evenly-spaced over the body of the vessel, each about 12-22 mm long. The pot is 13.3 cm tall, 150 mm diameter at the rim and 108 mm diameter at the base. Some inclusions have fallen out on

the surface, but it remains in good preservation, although a light deposit of manganate was noticed on the surface.

The pot found in 1935 by Burman is the base of a bucket-shaped vessel. The base is flat and the walls straight. Inside, the transition is gradual and the bottom is uneven inside and out. The whole construction is less well-done than other pots that have been examined and it seems this may be the remains of a novice's work. The fabric is not smooth and the pot itself seems to be moulded, rather than formed by modelling. The base of this pot, like 1979.49 has grass or straw impressions, possibly left as the pot dried. The walls of this pot are thick - 13.5 mm – and it has a clay-rich fabric with large angular pieces of stone evenly spread throughout. These are dark gray and measure 6-9 mm. The pot is brick red on the outside, dark brown on the inside and the core is black. It is undecorated and a base diameter was estimated at 140 mm. Only about 5% of this pot remains.

62. Scrainwood (Screnwood), Northumberland

Longworth lists this Collared Urn as lost in his 1984 volume, but this pot was available for study at the GNM. It is a mostly reconstructed pot with a small collar, a concave cavetto, pronounced shoulder and narrowing walls that end in a flat base. Inside the transition is abrupt to a flat base. The walls are 10 mm thick and the fabric is extremely gritty with angular lithic material, 3-6 mm wide, comprising upwards of 80% of the clay. It is possibly slipped, but the reconstruction obscures this. The Scrainwood pot is dark reddish brown on the outside, but again, the substances used in the reconstruction may influence this. The internal surface and core were not visible. The decoration on the pot is all done in thinner twisted cord (1.5 mm wide). Vertical rows on the collar with horizontal rows bordering them at the top and bottom dominate the vessel, and upright triangles, infilled with diagonal lines in the cavetto, are bordered at the shoulder by a single horizontal line. It is difficult to say how much of the pot is original as the reconstruction material covers much of the surface, but the pot could be measured. It is 12.6 cm tall, 113 mm wide at the rim and 75 mm wide at the base.

67. Rye Hill, Northumberland



The Collared Urn from Rye Hill, 1889.24 in the GNM, has a straight collar that flares only slightly at the bottom. The cavetto is straight, but somewhat concave and the shoulder is angular with a carination. Longworth (1984, 236) lists this pot as Secondary Series, North Western Style, Form IB. The walls are 10 mm thick and the fabric is very gritty with very angular and dark gray lithic inclusions. They are 5-6 mm wide, but there are also many that are smaller. The pot is slipped and wiped to hide the inclusions, but this does not fully cover them. Two seed impressions were noted on the vessel, one of these is depicted above. The surface is orange/red on the outside and the core is dark gray. A gray residue was observed inside the pot near the base and up to the rim on one side. This pot was not decorated consistently. On the collar, there are a series of grooves in diagonal lines: some are opposing, others are not, and others are vertical -- there is no real pattern to this. In addition, some are deep, whilst others are light. Even though the pot is well-formed, this may suggest that someone with less experience was allowed to decorate it. The Rye Hill pot is 14 cm tall, 123 mm wide at the rim and 85 mm wide at the base. About 97% of the original pot is present, but the slip is worn away in places.

68. Birkside Fell, Northumberland



The Collared Urn found at Birkside Fell is not listed in Longworth's (1984) review, but according to his criteria, this pot falls into the category of Primary Series, Form Ib. The rim of this pot is internally bevelled and slopes down inside the pot. The collar is straight, but then flares out at the bottom to hang over the straight cavetto underneath. The cavetto ends in an angled, but not emphasised, shoulder and then the walls, which are 20 mm thick, narrow to a wide, flat base. The transition inside is abrupt and there are grooves where it has been shaped so; the base inside is convex. The fabric of this Collared Urn is extremely gritty with angular and crushed gray lithic material, 4-5 mm wide. A very heavy slip has been applied over this to cover the inclusions that poke out and the pot has been buffed to a dull sheen. The external side is medium brown, the internal surface is dark brown and the core is black. The Birkside pot has been decorated using several types of motifs. On the rim, four deep grooves surround the pot, whilst on the collar, medium-weight (2 mm wide) twisted cord is impressed in a zigzag and the resulting triangles are filled with opposing diagonal lines. This is then bordered at the top with a single horizontal line of cord and at the bottom with a double horizontal line. On the body, fingernail impressions have been placed in a herringbone pattern just past the shoulder – they are especially deeply-set. Slight erosion at the rim and base have reduced this pot to a 99% survival, and it is 45 cm tall, 330 mm wide at the rim and 130 mm wide at the base.

APPENDIX 9: CORDONED AND BUCKET URNS*

2. Pinkie Mains, Musselburgh, Midlothian



NMS X.EA 233



NMS X.EA 234

Two urns were found at Pinkie Mains that are catalogued in the NMS as NMS X.EA 233 and NMS X.EA 234. NMS X.EA 233 has a bevelled rim that turns inward and a slightly bevelled collar to the first cordon. The walls, which are 14 mm wide, are straight below this, and are only divided by a second cordon about halfway down the vessel; they only narrow at the base. The fabric of NMS X.EA 233 is very gritty with crushed stone, 2-4 mm and up to 7 mm wide, grog, and burnt out organics. It is slipped on both sides and light brown in colour on both sides with patches of black, presumably from smoke clouds in the fire. The core is also black from incomplete firing. This Cordoned Urn is decorated on its outer surface with two rows of round-toothed comb (each 1 mm in diameter) and two horizontal grooves under this. A further row of comb and two more horizontal grooves fill the space to the first cordon. Under this cordon, a deep groove has been made, but the rest of the pot wall to the second cordon has been left plain. A possible seed impression was noted on the base and faint

*The numbering in this appendix correlates to the site numbers in 6.7

impressions, like that of straw or grass, imprint the base as if the pot was dried sitting on this material. Comb is an unusual motif to find on cinerary urns as cord, grooves and impression are more common. It is worth noting that the only other example is on the tiny Collared Urn-like pot, NMS X.EA 150, found at the nearby site of Kirkpark, Musselburgh. One large sherd and several smaller ones represent about 60% of the original pot and so the height could not be determined, but the rim diameter is 160 mm and the base is 110 mm wide.

The second Collared Urn, NMS X.EA 234, is less complete, represented by only a rim sherd. It is a medium-sized pot with a bevelled rim that turns inwards and outside it has a straight neck to the first cordon and then a straight wall. The walls of NMS X.EA 234 are similar in width to NMS X.EA 233 at 13 mm, but the fabric is much more silty with fewer and smaller inclusions. White, opaque, angular lithics, about 2-3 mm wide, and rounded light gray and pink lithics, 8-9 mm wide, are evenly-spaced. The pot is heavily slipped on both sides and it is yellow/brown on the outside, black on the inside and brown in the core. On the collar, incised diagonal lines, forming triangles in an inconsistent pattern, encircle the pot. Two horizontal grooves border this above and below and it is clear that this was put in after the triangles as it cuts them in several places. The rim makes up about 20% of the original pot, but a diameter of 210 mm was determined from its arc.

3. Kirkpark, Musselburgh, Midlothian



NMS X.EA 149 is a lovely, little Collared Urn, despite not being the best-made of the Kirkpark pots. It is catalogued by Longworth (1984, 307) as Secondary Series, Form IV. This pot has a flat, squared-off rim that has been pressed into shape, causing the clay to fold over near the rim. The neck is straight, but rounded and forms a collar that ends in a thick cordon. The cavetto is very wide and straight and its bottom edge is defined also by a cordon at the shoulder. The lower half of the pot then narrows abruptly towards a wide, pedestalled, flat base. Inside the transition is abrupt and marks where the finger was used to create this transition are clearly visible. Slight scraping can be seen on the neck inside where the walls were thinned and a seed impression is also clear (above photo). The walls of this pot are 10.1 mm wide and the fabric is very gritty with many large lithic inclusions and smaller gravel. Gray, angular lithic pieces, 3-5 mm wide, are evenly dispersed in this fabric, along with white specks. A heavy slip, now cracked, is on both sides and this has been fired brick red on the outside, brown/light gray inside and red/black in the core. A blackened area was observed in the top 1/3 of the pot inside (above photo). NMS X.EA 149 is decorated with a row of heavier twisted cord (2.5 mm wide strand) on the rim and on the collar, diagonal lines of cord, bordered by a horizontal line on the top and the bottom form the only decoration on the outside. The entire pot remains to this day and it measures 17.7 cm tall, 154 mm in diameter

at the rim and 86 mm at the base. A black, sooty deposit was noted in the bottom of the pot and up one side, and three marks, which look like fingerprints, were also recorded.



NMS X.EA 241

Recorded in the NMS as Kirkpark, Inveresk, Midlothian, NMS X.EA 241 is Anderson's (1894) urn #3 in the site report. This is a Cordoned Urn with asymmetrical straight sides and a squared-off, oval rim. The base has a slight pedestal and it is flat and inside, the transition is abrupt to a convex base. The walls are 10.2 mm wide and the fabric has angular, dark gray lithics added to it that are 3-5 mm wide. A slip on both sides is fired medium brown on the outside and dark gray inside and the pot is 24 cm tall, 200 mm x 220 mm in diameter at the rim and 130 mm x 120 mm at the base. Three rows of moderate twisted cord (2 mm thick strand) is impressed under the rim on the outside and then a double row of twisted cord in a pattern of triangles is below this. This is then bordered below by a further horizontal line before the cordon at the shoulder. About 60% of this pot is original.

4. Ford, Midlothian



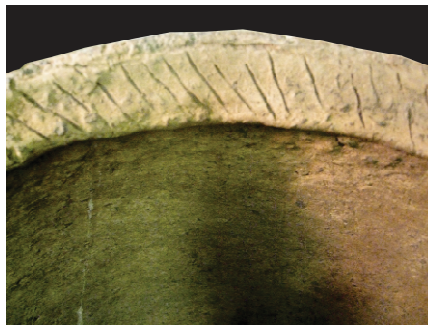
NMS X.EA 53 has a flat rim, a straight collar that is broken by a cordon, and then straight walls that narrow in the lower 1/3 to a wide, flat base. Inside, the transition is abrupt to a base that has been flattened by running the finger around the transition, creating a cone in the centre. The walls are 15 mm thick and the fabric is very gritty with angular dark gray, black and red lithic inclusions that are 5-7 mm wide. There are many smaller ones as well. A slip was placed over this, although much of it is now flaking away, and the walls are yellowish brown and there is blackening towards the base of the pot. The core is gray. Vertical rows of twisted cord ornament the 'collar' (from the rim to the cordon) and there is a row of cord on the rim. NMS X.EA 53 is 21 cm tall, 190 mm in diameter at the rim and 110 mm in diameter at the base. The entire pot remains, although there are some cracks in its surface.

5. Kipps, Torphinchen, West Lothian



The Cordoned Urn, NMS X.EA 106, that was found at Kipps, Torphinchen, has straight sides with an insloping rim. The walls are fairly thin, 10 mm, and the pot appears to have been made in three cylindrical parts as joins are visible at the cordons. The base is wide and flat on the outside; inside, the transition is abrupt to a flat base. The clay appears to be naturally gritty, and it is sandy to the touch and has many rounded dark gray lithic pieces, 3-6 mm and smaller. A slip on the surface is yellowish brown on all sides. Wide cross-hatching in moderate-sized twisted cord has been impressed between the rim and the first cordon and there are diagonal incised lines on the rim. A second cordon is placed halfway down the vessel, creating a tripartite form. About 80% of the original pot remains, and the rest has been restored and the pot is 30 cm tall, 220 mm x 200 mm at the rim and 128 mm at the base.

6. Sheriff flats, Thankerton, Lanarkshire



NMS X.EA 27

NMS X.EA 27 is the cordoned urn and has an internally bevelled rim and a straight collar that is defined by an applied cordon. The wall begins to narrow below this as it moves towards the base and this is only broken by a second applied cordon at the waist. The cordons were applied, but not fully smoothed onto the pot and clear joins can be seen underneath them. The base is pedestalled and flat and inside the transition is abrupt. The fabric of NMS X.EA 27 is extremely gritty, to the point that the surface, although slipped, remains lumpy. Angular, dark gray lithic inclusions, 5-6 mm wide, but many up to 9-10 mm, have been added to the clay and it is friable. The slip on the outside has been fired to a reddish brown colour

and the inside is dark brown with a blackened patch on the bottom of the pot and up one side of it. NMS X.EA 27 is decorated with diagonal slashes on the rim, bordered by a horizontal line of twisted cord. On the outside under the rim, two rows twisted cord form a top border, then a cross-hatched pattern of cord fills the space to the first cordon, which is bordered above by two horizontal rows of cord. The second cordon is approximately 4 cm below the first and the space in between has been left blank. The entire pot has been well-wiped. NMS X.EA 27 is 34 cm tall and 300 mm in diameter at the rim. The base is 125 mm wide. There are many scratches on the surface from years in the ground, but the pot is in good condition otherwise.

7. Drumelzier, Peeblesshire



NMS X.EQ 412



Three cinerary urns were found at this site (as well as a Beaker that is described in the Beaker section). NMS X.EQ 412 follows the Cordoned Urn tradition, whilst NMS X.EQ 413 and

NMS X.EQ 417 remain only as rims. Their characteristics lean more towards a Cordoned Urn tradition as neither have definite collars, but this cannot be certain on account of their poor preservation. They are categorised simply as Cinerary Urn here.

NMS X.EQ 412 has a simple rim with a flattened top and a straight neck to the first cordon. The walls, which are 12.5 mm thick, then narrow in a vase shape to a flat base. A fingerprint was noted on the outside of the pot (photo 2). The fabric of NMS X.EQ 412 is pasty, but there are many angular, dark gray lithics included, measuring 4-5 mm in width, and natural, subangular, white lithic pieces about 5-6 mm wide. A fairly heavy slip was applied to the external side of the pot and this is medium brown. The inside is dark brown and the core is dark gray. NMS X.EQ 412 is decorated with a horizontal grooved line under the rim on the outside and a cross-hatched pattern of grooves extends to the cordon, which is bordered on the top with a second horizontal groove. The pot is about 22.5 cm tall and the rim diameter was estimated to be 180 mm. The base is 112 mm wide. Only about 45% of this pot survives and it is reconstructed in places.



NMS X.EQ 413



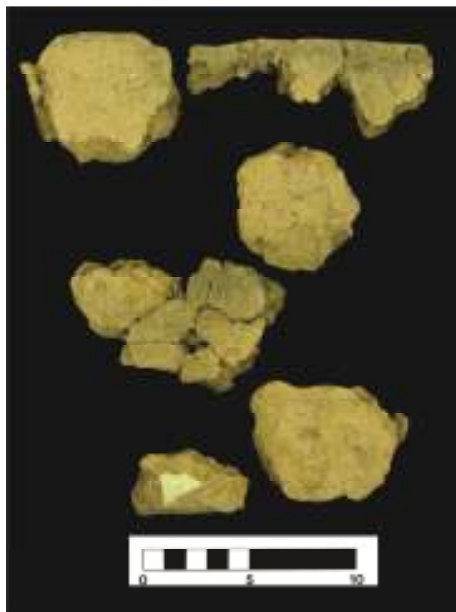
NMS X.EQ 417

NMS X.EQ 413 consists of about half a rim. It has an internal bevel, but is simple in shape, and straight walls that are 10.5 mm wide, extend to the first cordon at the collar. Like NMS X.EQ 412, the fabric is clay-rich with small, crushed, light gray inclusions, 1-2 mm wide.

The pot is slipped on both sides and is brick red outside, dark brown inside and has a dark brown core. Under the rim on the outside there are three horizontal rows of finely twisted cord. Below this is a panel of diagonal impressions of twisted cord to the cordon. The diameter of the rim is 230 mm, but this rim sherd really only makes up about 5% of the original pot. A deposit of manganate was noted on the external part of the rim.

NMS X.EQ 417 is also only a rim sherd that demonstrates an internal bevel on the rim and a straight neck. The walls are 10.4 mm thick and the fabric is very gritty with many lithic inclusions. These include rounded red stones, about 5-7 mm wide, and angular black ones, 2-4 mm. Although a heavy slip was applied to the outside of this pot, many of these still erupt from the surface. NMS X.EQ 417 is reddish brown on the outside, dark brown on the internal surface and it has a dark gray core. The decoration consists of two sets of two horizontal rows of twisted cord separated by a blank panel on the collar. This rim sherd represents less than 5% of the original pot so no dimensions could be obtained.

Whitton Hill, Milfield, Northumberland



The vessel, P5, was found in a cremation burial within the Whitton Hill hengiform enclosure and dates to the Early Bronze Age. It is a simpler cinerary urn, rather than an actual Collared Urn, and it has a simple, incurving rim with a rounded top and a slightly V-shaped profile. The base is flat and the transition inside is abrupt. The walls of this vessel are 15 mm thick and the fabric is extremely gritty with many large lithic inclusions that protrude from the walls. The fabric comprises dark gray and white, very angular lithics that are 8-18 mm wide

and two pieces of quartzite were also noted. A heavy slip covers this and it is reddish brown on the surfaces, and black in the core. Burnt areas were noticed towards the base on the inside and a texture, as if the pot was dried on straw or grass, is visible on the exterior base (photo 2). No decoration is visible on these remains. The rim is 150 mm wide and the base is 100 mm in diameter, but due to the fragmentary nature of the remains, no height could be measured. About 5 % of the vessel is represented here.

Outerston Hill, Temple, Midlothian

The sherds that make up NMS X.EQ 448 form only about 35% of the original pot and they were used to reconstruct the vessel. They suggest a narrow pot with a simple rim and a cordon about the centre of the pot's height. The fabric is extremely coarse with much rounded white lithic, 5-6 mm and smaller, and some angular gray lithic, 5 mm. A very heavy slip was used to cover this, which has cracked over time, and there are many seed impressions on the outside of the vessel (none of which look deliberate). The pot is decorated on its external side. There are inverted whipped cord triangles under the rim and horizontal grooves that form panels on the pot to its base. Each of these is infilled with opposing diagonal lines. On the cordon, this is done so that a herringbone pattern is revealed. NMS X.EQ 448 is orange with black patches and light gray in the core. It is 19.2 cm tall and 120 mm in diameter at the rim. The walls are 10.1 mm thick.

Kirkpark, Musselburgh, Midlothian



NMS X.EA 117B

This pot is also labelled NMS X.EA 117 and has a provenance of Kirkpark. Although it is not illustrated in the report, not all of the pots found are, and Lowe & Anderson (1894) state that

other urns were found at this site that were either not preserved or recorded by the workmen at this sand pit. This pot is therefore simply recorded as NMS X.EA 117b here to avoid anymore confusion with the pot, NMS X.EA 117, that is illustrated in the Kirkpark report.

NMS X.EA 117b is a small tub-shaped pot with a simple, inturned rim and straightish walls that gently round down to a flat, slightly pedestalled base. Inside, the transition is abrupt to a flat bottom. The walls are about 10 mm wide and the fabric is very sandy in texture with a lot of gravel and lithic inclusions in the clay. Angular pieces of quartz, 0.5 – 2 mm wide, sparkly black lithic material, and natural sand and gravel all feature in this fabric. The surfaces are smoothed, but remain sandy. NMS X.EA 117b is medium brown on its surfaces with a black, sooty deposit near the rim on the outside and in the upper half. It has no decoration, save for two stabmarks vertically placed on the middle of the pot wall. These are made by a round, pointed object, but they are not drilled through. The pot is 14.4 cm tall, 140 mm wide at the rim and 110 mm wide at the base. Almost the entire pot remains, except for a sherd that has fallen off the rim, and a white deposit, possibly calcium was observed on one side of the pot.

APPENDIX 10: ACCESSORY VESSELS*

2. Kirkpark, Musselburgh, Midlothian

Three accessory vessels were also found at Kirkpark: NMS X.EC 30, NMS X.EC 31 and NMS X.EC 32.



NMS X.EC 30



NMS X.EC 31

NMS X.EC 30 was found inside NMS X.EA 149, which was inverted over NMS X.EC 30 and human cremated remains. NMS X.EC 31 was then found in the same grave just below.

NMS X.EC 30 has a simple rim that bends inwards, a round body and a narrow, pedestalled, concave base. Inside, the transition is abrupt and the base is very convex; lines are visible around this transition where it was scraped in its formation. The walls of this pot are 7.5 mm thick and the fabric is sandy with bits of gravel (appears natural). A slip has been placed over this and the pot is brown with an orange/red hue. It is 7.8 cm tall, 89 mm in diameter at the rim and 60 mm wide at the base. The decoration on this pot is complex. Very faint incised lines have been used to create vertical panels of opposing diagonal lines that are bordered just under the rim and at the midsection by a horizontal panel of diagonal lines. The effect is almost like that of a weave of brocade. There are two holes in the side of this pot as well that have been made by a round, pointed object.

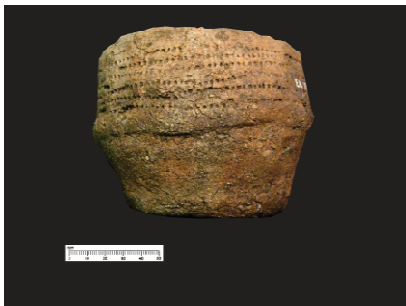
*The numbering in this appendix correlates to the site numbers on Map 6.8

NMS X.EC 31 is a small, cylindrical pot with a flat rim, straight sides and a flat bottom. The transition inside is abrupt to a convex base. The walls are 10 mm thick and the clay appears to be natural without added inclusions: it is sandy with a smooth finish and has tiny pieces of gray lithic in its composition. The pot is white with dark brown slip that has worn away in many places. Extremely fine twisted cord has been used to decorate this pot (<0.5 mm wide strand) in square panels of opposing vertical and horizontal lines. Two holes are drilled into the side of this pot. NMS X.EC 31 is a tiny pot that is only 6.3 cm tall, 66 mm wide at the rim and 63 mm wide at the base.



NMS X.EC 32

NMS X.EC 32 was found associated with NMS X.EC 30 and NMS X.EC 31, in that it was in the same ‘grave’, but it was found about a foot from the other pots. It is small with round, flattened shape and a flat bottom. The transition inside is abrupt to a convex base and the rim is simple. The walls are 9 mm thick and the clay fabric appears entirely natural. It is sandy in texture and there are very small lithic pieces and it is dark brown with a red core. Finely twisted cord (1 mm wide strand) has been used in diagonal lines on the rim to the midpoint of the vessel with one horizontal line dividing this in half. Two holes were drilled into the side. NMS X.EC 32 is 4.5 cm tall, 42 mm wide at the mouth and 35 mm wide at the base.



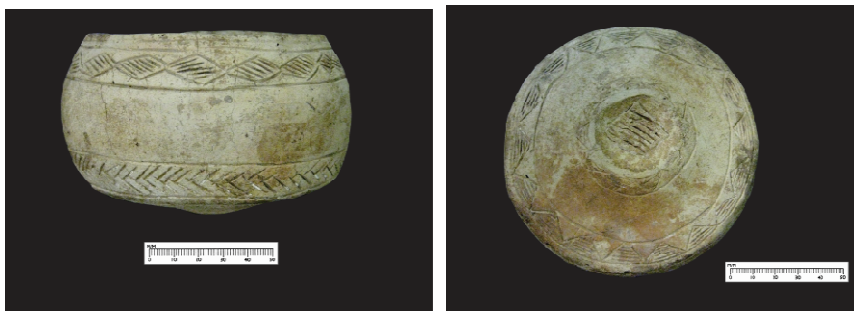
NMS

X.EA 150

NMS X.EA 150 is a very small pot with very thick walls. It has an inturning, flat rim that has been pushed down and overhangs inside the pot (see photo 2 and 3, above). The collar is straight and ends with a cordon at the collar edge and then the walls bend inward towards a flat base. Inside, the transition to the base is abrupt and the base is flat. It is visible where the base has been pressed down to create this transition. The pot is also coil-made and joins of the coils are visible inside on the wall (see third photo). The fabric of NMS X.EA 150 is gravelly with a lot of crushed stone. White/gray, crushed lithics, 0.5-2 mm wide, white crushed lithics, 6-8 mm wide, and quartz pieces were noted and a possible slip (light, if present) is on the outer surface. The entire pot is reddish brown with blackened areas inside. Decoration includes a horizontal line of moderately-sized twisted cord (2 mm thick strand) on half of the rim and short, vertical maggot impressions in cord on the other half. On the collar, five rows of a 3.5 cm wide comb with round teeth (1 mm in diameter) have been impressed. Comb is a motif usually associated with Beakers. Although it is seen on Food Vessels occasionally, Collared Urns are typically associated with cord impressions, grooves, slashes and impressions of birdbone, fingernails, etc... Its use here is compelling. Kirkpark yielded no Beaker finds; however, this is not to say that there may have been some originally since Lowe & Anderson (1894) state that other urns had been found by the workmen and by themselves that crumbled and were, therefore, 'not worth keeping'. It is possible that this pot is older than the other Collared Urns on-site and more related to the Food Vessel-shaped finds. On the other hand, its crude construction and inconsistent decoration may indicate that this pot was made by someone just learning how to make pots. Perhaps the use of comb was an experiment and the result of a potter creatively expanding their ability.

NMS X.EA 150 remains in its entirety and it is 8.3 cm tall. The diameter of the mouth is 93 mm and the base is 73 mm wide. A deposit of calcium on the top of this pot that runs down its side is light, but clearly visible.

3. Dunbar, East Lothian



Recorded as an accessory vessel to a Food Vessel, a publication about the find of NMS X.EC 4 was not listed in *PSAS* or on Canmore. It is thus assumed that this was a purchase or donation to the museum in the 19th century or early 20th century. This little pot has similar features to the one found at Belsay, Northumberland (1914.1) and, to some extent, the Rothbury, Northumberland (933.32) pot. It has an insloping rim and round body that resembles the collar of a Collared Urn. The lower part of the vessel is only a fraction of the vessel and it very quickly narrows to a concave base. The transition inside is abrupt/gradual to a flat base. This finely-made pot has only 6.5 mm wide walls and the fabric is clay-rich with a darker slip that obscures from vision any inclusions. The entire pot is white with a partially-worn dark brown slip. NMS X.EC 4 is decorated with a panel under the rim, bordered at the top and bottom by horizontal lines, of diamond shapes, infilled with diagonal lines. These are made with grooves. A second grooved panel near the bottom of the collar is also bordered by horizontal lines and is filled with a herringbone pattern. Under the collar is a third panel (see second photo above), again bordered by horizontal lines, that has a pattern of triangles that are filled with horizontal lines. This is further repeated around the very base and on the base is a single diamond with horizontal lines as fill. There are two holes in the pot at the base edge. Although the slip is worn, this pot remains in its entirety and it is 6.3 cm tall, 90 mm wide at the rim and 20 mm wide at the base.

4. Sherifflats, Thankerton, Lanarkshire



NMS X.EC 20 is a small, globular pot with an insloping rim that then bends out to a ball profile down to a flat base. Inside, the transition is abrupt to a flat base. The walls of NMS X.EC 20 are 10.1 mm thick and it has been made of clay with a fairly gritty fabric with many pieces of natural quartz, 1 mm wide, and crushed gray lithic material, smaller than 1 mm. The surfaces are orange and decoration has been incised and grooved. Diagonal lines ornament the rim top and on the outer surface, two horizontal panels of diagonal lines are separated by

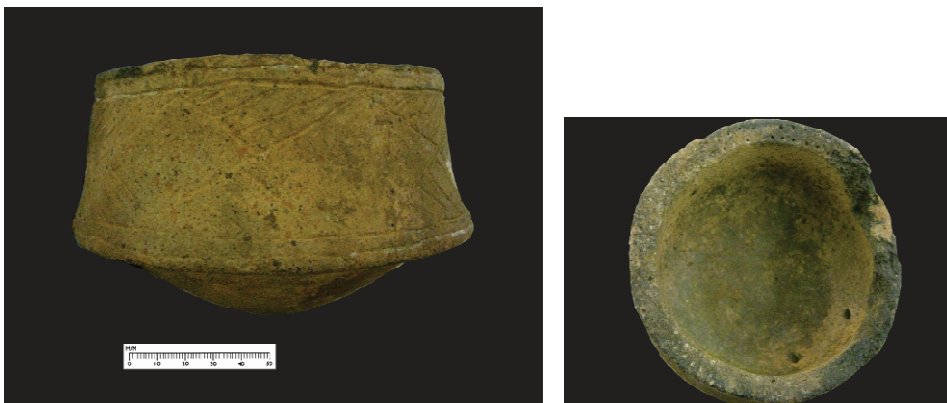
double horizontal lines. This little pot survives in its entirety; it is 6 cm tall, 55 mm wide at the rim and 60 mm wide at the base.

6. Lilburn Hill, Northumberland



Donated to the Museum of Antiquities in 1889, this incense cup (1889.22/2) as well as a Beaker (1889.22/1), are simply provenanced to Lilburn Hill, where finds were made, later, in 1945 and 1954. It is a small pot with a flat rim and rounded walls that extend down to a pedestalled, flat base. Inside, the transition is gradual to a rounded base. The walls of this pot are 9 mm thick and the fabric is extremely gritty with crushed, black lithic material, 0.5-1.5 mm wide, and white lithics greater than 1 mm wide. The pot is orange/red on all surfaces and the core is light gray with a white residue on one side of the external surface (possibly calcium). It is 5.9 cm tall, 75 mm wide at the rim and 50 mm wide at the base. The Lilburn Hill incense cup is decorated by right-handed thumbnail impressions that are set in vertical rows around the pot on the outside, and a horizontal row on the rim top. Only a small part of the rim is missing so it is estimated that this pot remains in 99% of its original form.

8. Belsay, Northumberland



The incense cup found at Belsay, 1914.1, is dominated by a Collared Urn-like collar that is straight, but bends out towards the edge that overhangs the rest of the pot. Under this, the lower portion of the pot slants quickly to a small, concave base. Inside, the transition is gradual to a rounded base. The walls of this pot are 10 mm wide and the fabric is very gritty and sandy consisting of prepared, angular black lithics, 3-4 mm wide, and black, crushed lithics, 1-2 mm wide. A few larger lithic inclusions were also noted, evenly dispersed through the fabric. The pot had originally been slipped, but only a small patch of this remains and so the colour is yellowish brown with red patches over the surfaces. The core, though, is black. This pot is decorated with two rows of stabmarks on the rim top. On the collar, two horizontal grooves border a pattern of triangles with a background of opposing diagonal lines. Two stabmarks have been drilled through the wall of the pot at the shoulder on one side. This little pot is 6.7 cm tall, 90 mm wide at the rim and 20 mm wide at the base. Essentially, the entire vessel is present, save for its eroded slip, but manganate was observed on the surfaces.

9. Rothbury, Northumberland



The incense cup that is labelled with a provenance of Rothbury could not be found in the literature, but it has an early acquisition number, 933.32, and so it is likely that this was acquired in the Simonside Hills by Dixon in 1892-- his report mentions many pots from many cairns, some of which were kept, and others that were not. However, Tate's (1862) description of cairns near Tosson, Rothbury mention urns as well and give the impression that this area not only yielded a lot of burials, but was dug without being recorded frequently. As a consequence, this pot could have been donated to the Museum of Antiquities by anyone of these antiquarians.

The rim of this pot is inturned and the collar flares out to hang over a straight cavetto. The shoulder is carinated and then the walls narrow quickly to a wide, flat base. Inside, the transition is abrupt to a flat base. The walls are 10 mm wide and the fabric gravelly with rounded lithics, 2-3 mm wide. Most of the fabric is obscured by a gray slip. The decoration on this pot is done in twisted cord. There are short vertical lines with a horizontal line on the outer rim and a herringbone pattern on the collar. Three horizontal rows of cord were then impressed into the cavetto and two sets of double stabmarks, making holes through the vessel wall, are on opposite sides of the pot. About 75% of this pot has survived and it is 6.5 cm tall, 62 mm wide at the rim and 50 mm wide at the base. Manganate was also noticed on the surfaces.

11. Low Moralee Farm, Haydon Bridge, Northumberland



1921.4



1921.5

Two ‘incense cups’, recorded from Moralee Farm, were found under an inverted Collared Urn (which was not available for study). One of these (1921.4) is described as a miniature Collared Urn, whilst the other (1921.5) is simply called an incense cup.

The first described here is 1921.4, which is a tiny pot with flat rim that has been flattened by pressing down on the vessel so that the rim overhangs the inside walls. The collar turns inwards and accounts for about half of the vessel, and then the walls bend in under this to a flat base. Inside, the transition is abrupt to a convex base. The walls of this pot are 7 mm wide and the fabric cannot be examined because it is completely covered by a thick slip. This is pinkish/red with a grey hue overtop. The pot is decorated on the rim top and outside of the rim with impressions of a hollow, circular object (perhaps a reed). Some are in straight lines, whilst others are more randomly set. The only other example of this motif is found on the Collared Urn, NMS X.EA 186, from Berwickshire (described in the Collared Urn section). A light deposit of manganate was noted on the surface of this vessel and it is 5 cm tall, 50 mm wide at the mouth and 45 mm wide at the base. What is particularly striking about this pot is just how analogous in form, construction methods and provenance it is to NMS X.EA 150,

found at Kirkpark, Musselburgh, Midlothian. Considering the variation seen in accessory vessels, even those found in the same grave, it is worth noting the similarity between these two.

The second accessory vessel, 1921.5, is a small pot with a simple, upright rim. It ends with a ridge on the inside of the pot and then narrows below, but on the outside, it has splayed sides leading to a flat base (see photos 1 and 3). The transition inside is abrupt and the base slightly convex and the join of the wall and base can be seen inside, which demonstrates that this pot was built up from a flat base, rather than having been pinched. The walls of 1921.5 are also 7 mm wide, but the fabric is sandy with a lot of gravel. Some small pebbles were noted within this. The pot was slipped, but this is mostly worn away now and it is pinkish/red on the external surface with a yellow/brown interior. The decoration is much more elaborate than 1921.4. Inside the rim, two horizontal grooves form borders for a pattern of inverted triangles that are infilled with three stabmarks each. On the outside, two horizontal grooves under the rim are filled with a row of stabmarks, and then a horizontal panel, stretching to the mid-section of the pot is further divided by vertical grooves. Each of these have sideways triangles grooved into them and some are infilled with stabmarks, whilst others are plain and have a stabmarked background. One narrower vertical panel has only a vertical row of stabmarks. The lower half of the pot is plain, except for a final horizontal panel near the base that is bordered at the top and bottom by horizontal grooves and filled with a horizontal row of stabmarks. Interestingly, the base is also decorated. Within the join mark of the base and wall, a grooved cross, made by parallel lines, is filled with crossing rows of stabmarks. This pot is 6.5 cm tall, 78 mm wide at the rim and 45 mm wide at the base.

Appendix 11: Radiocarbon dates for Impressed Ware in the Tyne-Forth Region*

Lab #	Material + Context	$\delta^{14}\text{C}$ (‰)	Radiocarbon Age (BP)	Calibrated date range (95% confidence)	Reference
Cheviot Quarry, Northumberland					
OxA-16178	Pit, carbonised residue	-27.2	4148±32	2880-2580 cal BC	Johnson and Waddington 2009
OxA – 16099	Carbonised residue from Impressed Ware sherd from pit MAP/F204	-27.4	4348±32	3090-2890 cal BC	Johnson and Waddington 2009
Thirlings, Northumberland					
OxA-16100	Pit, charred hazelnut	-25.2	4678±34	3630-3360 cal BC	Miket et al. 2009
HAR – 6658	Charcoal, AML 757515, id as c 50% hawthorn, hazel, from large branches and timbers; pit, bulk charred wood	-26.1	4450±100	3500-2880 cal BC	Miket et al. 2009
OxA-16164	Posthole from poss trapezoidal structure, burnt bone	-25.6	4442±35	3340-2920 cal BC	Miket et al. 2009
HAR-1451	Pit, bulk oak and hazel	-26.5	4080±130	2920-2210 cal BC	Miket et al. 2009
HAR – 1450	Charcoal: c 20% hawthorn type (<i>Crataegus/Pyrus/Sorbus/Malus</i> sp), hazel from pit	-26.5	4270±100	3270-2570 cal BC	Miket et al. 2009
Meldon Bridge, Peeblesshire.					
SRR-646	Oak, hazel and poss ash charcoal from pit B12 inside large timber enclosure	-25.1	4286±50	3020-2770 cal BC	Speak and Burgess 1999
SRR-647	Charred hazelnut shells from pit B12 inside large timber enclosure	-26.0	4240±60	2930-2630 cal BC	Speak and Burgess 1999
SRR-645	Charred indet	-26.5	4080±80	2890-2460 cal	Speak and

	wood in pit B06 inside large timber enclosure			BC	Burgess 1999
SRR-643	Hazelnut and wood charcoal from pit B14 inside large timber enclosure	-25.6	4676±180	3910-2910 cal BC	Speak and Burgess 1999
SRR-644	Wood charcoal from pit B15 inside large timber enclosure	-27.2	4686±90	3650-3120 cal BC	Speak and Burgess 1999
GU-1053	Wood charcoal from pit S13 inside large timber enclosure	-25.2	4505±65	3490-2930 cal BC	Speak and Burgess 1999
GU -1054	Wood charcoal from pit S14 inside large timber enclosure	-25.1	4560±65	3510-3020 cal BC	Speak and Burgess 1999
GU -1055	Wood charcoal from pit S15 inside large timber enclosure	-25.1	4380±65	3340-2880 cal BC	Speak and Burgess 1999
Gu-1056	Wood charcoal from pit N40 inside large enclosure	-25.5	4570±75	3620-3020 cal BC	Speak and Burgess 1999
GU-1052	Wood charcoal from pit N43 inside large timber enclosure	-25.4	4685±85	3650-3130 cal BC	Speak and Burgess 1999
GU -1057	Wood charcoal from pit N45 inside large timber enclosure	-25.5	4725±90	3700-3340 cal BC	Speak and Burgess 1999
Blackshouse Burn, Lanarkshire					
GU-1983	Oak post set in hole 140 at first construction of enclosure; <i>terminus ante quem</i> for beaker found on-site	-25.3	4035±55	2697-2453 cal BC	Lelong & Pollard 1998

*all dates were re-calibrated using OxCal 4.1 (Bronk Ramsey 2009)

Appendix 12: Radiocarbon dates for sites with Grooved Ware in the Tyne-Forth region*

Lab #	Material + Context	$\delta^{14}\text{C}$ (‰)	Radiocarbon Age (BP)	Calibrated date range (95% confidence)	Reference
Cheviot Quarry, Northumberland					
SUERC-11296	charred hazelnut shell from pit fill 2168 containing GW	-26	4250±35	2920-2760 cal BC	Johnson and Waddington 2009
OxA-16096	Charred hazelnut shell from pit fill 2168 containing GW	-23.3	4177±33	2890-2630 cal BC	Johnson and Waddington 2009
OxA-16070	Charred hazelnut shell from pit fill 2133 containing GW	-23.7	4152±31	2880-2600 cal BC	Johnson and Waddington 2009
SUERC-11295	Charred hazelnut shell from pit fill 2133 containing GW	-24.4	4130±35	2880-2570 cal BC	Johnson and Waddington 2009
Milfield North pit					
OxA-10634	Charred hazelnut shell from pit 1 lower fill (9)	-24.9	3887±38	2620-2460 cal BC	Passmore and Waddington 2009
OxA-10635	Charred hazelnut shell from pit 1 lower fill (9)	-23.2	3955±38	2570-2340 cal BC	Passmore and Waddington 2009
Lamb's Nursery, Dalkeith, Midlothian					
GU-8105	Poss external hearth with lower fill charcoal (oak and	-25.9	4070±110	2866-2468 cal BC (1 sigma) 2898-2294 cal BC (2 sigma)	Cook 2000

	hazel) and GW sherds; context 92				
AA-32604	Context 186: stakeholes of structure A – one cut with charcoal (oak) and 3 sherds pottery	-23.9	4130±50	2866-2582 cal BC (1 sigma) 2881-2499 cal BC (2 sigma)	Cook 2000
GU-8102	Group features to south of Structure A with uniform fills: bulk sample of charcoal from one (oak and hazel)	-25.7	4510±80	3361-3032 cal BC (1 sigma) 3499-2919 cal BC (2 sigma)	Cook 2000

*all dates were re-calibrated using OxCal 4.1 (Bronk Ramsey 2009)

Appendix 13: Radiocarbon dates associated with Beaker pottery in the Tyne-Forth region*

Lab #	Material + Context	$\delta^{14}\text{C}$ (‰)	Radiocarbon Age (BP)	Calibrated date range (95% confidence)	Reference
Cheviot Quarry, Northumberland					
OxA-16163	Carbonised residue on beaker sherd from pit	-25.8	3625±40	2140-1880 cal BC	Johnson and Waddington 2009
Chatton Sandyford, Cairn 1, Northumberland					
GaK-800	Charred oak stakes from skateholes for Beaker inhumation grave B1 in cairn 1		3620±50	2140-1880 cal BC	Jobey 1968
Wether Hill, Northumberland					
Beta-124785	Timber cist		3740±70	2400-1940 cal BC	Archaeological Services University of Durham 1999
AA-35524	Plank from side of timber cist	-25.6	3675±55	2210-1890 cal BC	Archaeological Services University of Durham
AA-35523	Plank form lid of timber cist	-26.2	3670±50	2200-1910 cal BC	Archaeological Services University of Durham
Cartington Coffin (Northumberland)					
GU-1648	Sample of wood from the outer growth rings of a hollowed out oak coffin associated with a now lost 'drinking cup'		3790±65	2470-2020 cal BC	Jobey 1984

Low Hauxley, Cairn 1					
OxA – 5553	Skeletal material from cairn 1 assoc with beaker		3615±45	2140-1880 cal BC	Drury et al. 1995
OxA-5554	Skeletal material from cairn 1 assoc with beaker		3630±55	2200-1880 cal BC	Drury et al. 1995
Skateraw (1953 cist), East Lothian					
OxA-V-2164-39	Bone from adult male in burial		3846±29	2400-2200 cal BC	Date obtained in 2006 NMS project; NT77NW 7
SUERC-2865	Bone from adult male in burial		3785±35	2290-2140 cal BC	Date obtained in 2004 NMS project; NT77NW 7
Ruchlaw Mains, East Lothian					
OxA-V-2167-42	Adult male bone (aged 45+)		3826±39	2350-2200 cal BC	Ashmore et al. 1982; NT67SW 14
Boatbridge Quarry (cist 2), Thankerton, Lanarkshire.					
OxA-V-2168-42	Very tall adult inhumation (adolescent?), cist 2		3824±32	2340-2200 cal BC	NMS project; NS93NE 27; Sheridan 2007
West Fenton, East Lothian.					
OxA-13514	Inhumation of older child (11-12 years)		3806±30	2290-2200 cal BC	NMS project; NT48SE 14; Sheridan 2007
Juniper Green, Midlothian					
OxA-13513	Inhumation of adult male, 40-55 years		3797±31	2290-2150 cal BC	NMS project; NT16NE 4; Sheridan 2007
Thurston Mains, East Lothian					
OxA-1360	Bone from inhumation 2 of adult female in cist with a Beaker and flint flake		3794±26	2290-2150 cal BC	NMS project; NT77SW 16; Sheridan 2007
OxA-13097	Bone from		3721±33	2200-2030 cal	NMS project;

	inhumation 1 in grave with two bodies buried with 1 beaker			BC	NT77SW 16; Sheridan 2007
Abbey Mains Farm, East Lothian					
OxA-16491	Bone from inhumation of adult female (17-25 years), accompanied by joint pork		3780±38	2290-2140 cal BC	Lawson et al. 2002; NMS project NT57NW 115
OxA-V-2199-26	Bone from inhumation of adult female (17-25 years), accompanied by joint pork		3773±31	2280-2130 cal BC	Lawson et al. 2002; NMS project NT57NW 115; Sheridan 2007
Doon's Law, Whitsome, Scottish Borders					
AA-29066	From bone of inhumed adult female, assoc with charcoal, copper awl and flint		3645±65	2140-1920 cal BC	NMS project; NT85SE7; Sheridan 2007
West Water Reservoir (cist 7), Scottish Borders					
GrA-26518	Beaker/FV hybrid pot with inhumation in cist; cremation with FV in same cist + burnt bone beads and flint tool. Sample from cremated bone		3570±40	2010-1880 cal BC	NMS project; NT15SW 37; Sheridan 2007
Eweford, East Lothian					
SUERC-5299	Carbonized barley grain from fill pit		3775±35	2280-2130 cal BC	MacGregor 2005; Lelong & MacGregor

	3, thought to be connected with ceremonies of local EN long mound				in press; Sheridan in press; Nt67NE 474
SUERC-5309	Carbonised barley grain from long mound in deliberate deposit on surface where long mound re-shaped		3725±40	2200-2030 cal BC	MacGregor 2005; Lelong & MacGregor in press; Sheridan in press; Nt67NE 474
Harehope Cairn, Peeblesshire					
GU-1214	Charcoal of alder, hazel, willow and elm from pit with Cremation H; assoc with 'beaker' sherds. Jobey seems to hover between B and GW (N-D?)		2180±90bc		Jobey (1978-80)
Lamb's Nursery, Dalkeith, Midlothian					
AA-32601	Hazel charcoal fragment from pit in Structure B (context 112)	-26.6	3845±50	2403-2202 cal BC (1 sigma) 2466-2141 cal BC (2 sigma)	Cook 2000
Chatton Sandycroft, Northumberland					
GaK-800	Charcoal sample from stakeholes preceding burial 1; no assoc finds, but preceding burial 2 with Beaker		3620±50		Jobey 1968
GaK-1507	Charcoal		2890±90 BC		Jobey 1968

	from under cairn E (nearest cairn I)				
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Appendix 14: Radiocarbon dates for Food Vessels in the Tyne-Forth region*

Lab #	Material + Context	$\delta^{14}\text{C}$ (‰)	Radiocarbon Age (BP)	Calibrated date range (95% confidence)	Reference
Turf Knowe, tri-radial cairn, Northumberland					
SUERC-4481	indet. Charcoal from deposit on which FV sitting	-24.9	3010±40	1400-1120 cal BC	Archaeological Services University of Durham (Marshall et al. in prep)
AA-46486	Cremated bone from inside FV from central cist	-24.9	3860±45	2470-2150 cal BC	Archaeological Services University of Durham (Marshall et al. in prep)
SUERC-4485	Cremated bone from burial in FV in SE cairn	-26	3360±35	1750-1530 cal BC	Archaeological Services University of Durham (Marshall et al. in prep)
Wether Hill cairn, Northumberland					
Beta-124784	Barley seed embedded in FV fabric		2200±60	400-50 cal BC	Topping 2001
Low Hauxley pit burial, Northumberland					
SUERC-27330	Cremated bone from an unusual FV type pot	-24.7	3470±60	1950-1620 cal BC	Waddington 2010
Milfield north henge, pit C, Northumberland					
HAR-1199	Indet. Bulkied charcoal assoc with burial in FV bowl	-26.2	3750±80	2470-1940 cal BC	Harding 1981
Kellah Burn,					

Northumberland					
GrA-26545	Cremated bone from within the urn		3650±40	2140-1900 cal BC	Brindley 2007
Howick Heugh, Northumberland					
I-6970	Charred wood accompanying cremation 1 in rock fissure within stone ring cairn, assoc with urn		3390±90	1930-1460 cal BC	Jobey 1975
Well House Farm, Northumberland					
GU-1340	Indet. Charcoal wood from cist packing. No burial survived acid soil but 2 FV		3635±120	2400-1680 cal BC	Gates 1981
Whitton Hill, pit 28, Northumberland					
BM-2266R	Indet. Bulkied charcoal assoc with cremation burial in a FV	-25.9	3960±130	2890-2040 cal BC	Miket 1981
Cloburn Quarry, Cairngryffe Hill, Lanarkshire					
Beta-111006	Charcoal of alder from fill of outer postholes in phase 2 – EBA funerary activity before the cairn was constructed	2 sigma	3450±50	1890-1630 cal BC	Lelong & Pollard 1998
Beta-111007	Sealed cremation deposit from phase 2 from <i>Betula</i> (birch) charcoal; assoc with Neolithic pottery	2 sigma	3460±60	1910-1620 cal BC	Lelong & Pollard 1998
Ratho,					

Midlothian					
GrA-24016	Cremation	2 sigma	3635±40	2134-1896 cal BC	Sheridan 2004

*all dates were re-calibrated using OxCal 4.1 (Bronk Ramsey 2009)

Appendix 15: Radiocarbon dates for Other (non-Beaker) contemporary pottery*

Lab #	Material + Context	$\delta^{14}\text{C}$ (‰)	Radiocarbon Age (BP)	Calibrated date range (95% confidence)	Reference
Whitton Hill, Northumberland					
BM-2206	Charcoal from timber set in upper ditch fill	-25.3	3740±50	2300-1980 cal BC	Miket 1985
BM-2265	Charcoal from timber set in upper ditch fill	-26.2	3680±80	2300-1880 cal BC	Miket 1985
BM-2266	Charcoal from central burial (pit 28) inside hengiform	-25.9	3660±50	2200-1890 cal BC	Miket 1985
Milfield North Henge, Northumberland					
HAR-1199	Indet. Charcoal from internal pit C from layer above the pot	-26.2	3750±80	2470-1930 cal BC	Harding 1981
Milfield Village (Whitton Park), Northumberland					
Beta-194560	Charred wood from short-lived species in posthole of structure	-25.9	3630±40	2140-1880 cal BC	Waddington 2006
Milfield North Double Pit Alignment, Northumberland					
BM-1650	Charcoal from layer	-25.7	3740±50	2300-1980 cal BC	Harding 1981

	11, pit 2, assoc with GW, sample 1978/128				
BM-1652	Charcoal from layer 12, pit 2, assoc with GW, sample 1978/125	-25.4	3770±50	2350-2030 cal BC	Harding 1981
BM-1653	Charcoal from layer 13, pit 2, assoc with GW, sample 1978/124	-23.8	3610±80	2200-1740 cal BC	Harding 1981

*all dates were re-calibrated using OxCal 4.1 (Bronk Ramsey 2009)

Appendix 16: Radiocarbon dates for Cinerary Urns (Collared and Cordoned) in the Tyne-Forth region*

Lab #	Material + Context	$\delta^{14}\text{C}$ (‰)	Radiocarbon Age (BP)	Calibrated date range (95% confidence)	Reference
Birkside Fell, ring cairn, Northumberland					
Beta-119667	Ash charcoal, from within the urn and fill of pit in which it was situated	-25.0	3570±60	2130-1740 cal BC	Tolan-Smith 2005
Beta-119668	Ash charcoal from within the urn and fill of pit in which CU was situated	-25.0	3510±60	2020-1680 cal BC	Tolan-Smith 2005
Kirkhill, West Hepple, Northumberland					
SRR-133	Indet. Charcoal wood assoc with inverted CU containing cremations in Pit A		3242±90	1740-1310 cal BC	Miket 1974
Longniddry, East Lothian					
GrA-18016	Cremated bone from burial with EQ 503		3305±40	1687-1498 cal BC	Sheridan 2007
Eweford, East Lothian					
Gu-12669	Collared Urn, pot 1		3455±35	1881-1689 cal BC	Sheridan 2007
Gu-12708	Pot 2		3435±40	1881-1637 cal BC	Sheridan 2007
Gu-12682	Pot 3		3370±35	1746-1536 cal BC	Sheridan 2007
Magdalen Bridge, Joppa, Midlothian					
GrA-18025	Cremated bone from		3280±40	1620-1510 cal BC	NMS Dating Cremated

	burial with EA 42				Bones Project; Sheridan 2003
GrA-26142	Cordoned Urn NMS X.EA39		3445±40	1884-1666 cal BC	Sheridan 2007
GrA-18025	Cordoned Urn NMS X.EA 42		3280±40	1665-1453 cal BC	Sheridan 2007
Saxe-Coburg Place, Edinburgh, Midlothian					
GrA-18020	Cordoned Urn		3299±34	1668-1499 cal BC	Sheridan 2007
Standrop Rigg, Northumberland					
	Occupation layer from House 2; charcoal		1050±80bc		Jobey 1983
	Pit A from house 4; charcoal		2070±80 bc		Jobey 1983
Green Knowe, Peeblesshire.					
GU-1012	Carbonized wood (hazel and willow) from groove of house 2; pot 8 from lower level than this		1025±63 bc		Jobey (1978- 80)
GU-1011	Burnt fill in groove of house 3		984±45 bc		Jobey (1978- 80)
GU-1213	Carbonised wood (alder, birch, hazel and willow) from wall groove of house 5; associated with 'flat- rimmed ware'		1270±75 bc		Jobey (1978- 80)
Meldon Bridge, Peeblesshire					
GrA-23406	Bucket Urn (F22b, 75)		3040±50	1418-1130 cal BC	Sheridan 2007

Harehope Cairn, Peeblesshire					
GU-1212	Charcoal of hazel and aspen or popular frags assoc with CU inverted over cremation J and an accessory vessel (pots 8, 9)(of child, 4-5 years)		1265±90 bc		Jobey 1978-80)
Murton High Crag, Northumberland					
HAR-60201	Burnt material from patch associated with earliest perimeter of unenclosed settlement		2960±80		Jobey & Jobey 1987
Lintshie Gutter, Crawford, Lanarkshire					
GU-3203	Hazel charcoal in groove of platform 8 (which post-dates platform 7, assoc with cordoned urn)		1980±60 bc		Terry 1995
Lamb's Nursery, Dalkeith, Midlothian					
AA-32600	Context 101 of ring-groove of Structure B	--28.9	3140±50	1487-1322 cal BC (1 sigma) 1518-1164 cal BC (2 sigma)	Cook 2000
AA-32599	Context 76 of ring-groove of Structure B	-28.7	3150±50	1491-1324 cal BC (1 sigma) 1520-1313 cal BC (2 sigma)	Cook 2000
AA-8104	Posthole in	-26.3	3260±90	1679-1431 cal	Cook 2000

	Structure B, context 87			BC (1 sigma) 1741-1320 cal BC (2 sigma)	
Gourlaw, Midlothian					
GrA-24850	Collared Urn	2 sigma	3525±35	1942-1751 cal BC	Sheridan 2007
Lookout Plantation, Northumberland					
HAR-4385	Wood charcoal sample from Entrance area of house, F8		3370±80		Monaghan 1994
HAR-4388	Wood charcoal from Entrance of house, F7		3410±80		Monaghan 1994
HAR-4386	Wood charcoal from Inner post ring of house, F31		3230±110		Monaghan 1994
HAR-4387	Wood charcoal from Inner post ring of house, F30		3090±130		Monaghan 1994
Stoneyburn Farm, Crawford, Lanarkshire					
GU-3260	Cremation pit under cairn 003, context 016, charcoal (birch) assoc with burial of female aged 25-30 and accessory vessel. Some carinated bowl in cairn fill, but also in pits dating to EN under neighbouring		3450±50	1878-1695 cal BC (1 sigma) 1900-1670 cal BC (2 sigma)	Banks 1995

	cairn 002 so prob residual				
GU-3259	Cremation pit below cairn 004, charcoal (birch) (context 29); older female aged 40+. Beaker in cairn fill above.		3360±50	1737-1613 cal BC (1 sigma) 1856-1520 cal BC (2 sigma)	Banks 1995
Dunion, Scottish Borders					
GrA-24006	Vase Urn	2 sigma	3225±45	1610-1419 cal BC	Sheridan 2007

*all dates were re-calibrated using OxCal 4.1 (Bronk Ramsey 2009)